

[10_01]九州大学大型計算機センター広報表紙奥付等

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ライブラリプログラム登録一覧表

(昭和52年3月1日現在)

1. 九州大学作成

1.1 九大センターで開発または収集されたプログラムで以下のような形式と意味をもっています。

形式 $\overset{\textcircled{1}}{A} \overset{\textcircled{2}}{9} / \overset{\textcircled{3}}{A} A / \overset{\textcircled{4}}{A} X X X X X$ A:英字, 9:数字, X:英字または数字

意味 ①……分類コードを示す。

②……作成元を示す。QC:センターで開発収集 QU:利用者提供

③……用途を示す。A:ALGOL F:FORTRAN Z:その他(応用プログラム等)

④……プログラム名(サブルーチン名, 手続き名, エレメント名)

プログラムライブラリ分類コード表

A プログラムによる算術演算	1.実数 2.複素数 3.BCD演算 4.級数	I 入力	1.2進 2.8進 3.10進 4.BCD 5.紙テープ 6.補助記憶 9.複合入力
B 初等関数	1.三角関数 2.双曲線関数 3.指数関数および対数関数 4.平方根, 立方根など 5.べき級数 6.その他	J 出力	0.一般 1.2進 2.8進 3.10進 4.BCD 5.アナログ 6.プロット 7.複合出力
C 多項式および特殊関数	1.多項式の値 2.多項式の零点 3.特殊関数の値 4.連立非線型代数方程式 5.連立超越方程式 6.ベッセル関数 7.関数の極小化	K 内部情報伝達	1.ドラムの読み書き 2.磁心より磁心, ドラムよりドラムなど
D 関数に対する演算および微分方程式の解	0.積分方程式の数値解 1.数値積分 2.常微分方程式の数値解 3.偏微分方程式の数値解 4.数値微分 5.階差方程式の数値解 6.関数の変換	L アセンブラ, コンパイラなど	1.アセンブラ 2.コンパイラ 3.モニタ関係
E 内挿および外挿	1.表索引と内挿 2.曲線のあてはめ 3.スムージング(平滑化) 4.階差	M 特殊情報処理	1.分類 2.内部変換(固定より浮動様式へなど) 3.照合およびませあわせ
F 行列、ベクトルおよび連立一次方程式に対する演算	1.行列演算 2.固有値と固有ベクトル 3.行列式 4.連立一次方程式	N デバッグングルーチン	1.トレーシングトラッキング 2.ダンプ 3.サーチ 4.ブレークポイント印刷
G 統計解析および確率	1.データ解析 2.相関および回帰解析 3.時系列 4.分散分析 5.乱数発生 6.多変量解析 7.密度関数分布関数、パーセント点 8.順列, 組合わせの発生置換 9.その他	O シミュレーション	
H オペレーションズリサーチおよびシミュレーション	1.リニアプログラミング 2.ゲームの理論 3.PERT/CPMの基本ルーチン 4.予測関係 5.DYNAMO	P 計算機診断プログラム	
		Q サービスプログラム	1.破算, 帰零プログラム 2.チェックサムプログラム 3.磁気テープ 4.時計 9.その他
		Y 特定の分野に対する開発プログラム	1.結晶解析 3.原子核 Y0.その他 4.原子分子
		Z その他	

1.2 表の説明

1) 表中ファイル名とあるのは登録されている大記憶のファイルの名前を示しますが、MTとあるのは磁気テープに登録されていることを示します。ファイル名とLIEDで使うファイル定義名は以下の通りです。

	ファイル名	ファイル定義名	内 容	形 式
P	QS. PLIB. RB	P. LIB	利用者提供・センター開発ライブラリの内基本的なルーチン	RB
PT	QS. PLIB. TEST	P. TEST	試用期間中ライブラリの内基本的なルーチン	RB
A0	QS. ALIB. RB0	_____	利用者提供応用プログラム(原子分子)	RB
A1	QS. ALIB. RB1	_____	" (原子核)	RB
A2	QS. ALIB. RB2	_____	" (DYSTALプログラム群)	RB
AE	QS. ALIB. EB	_____	"	EB
MT			利用者提供応用プログラム	EB

2) 登録番号の前に*印がついているものは試用期間中のライブラリ, **印のあるものは新規登録で試用期間中のライブラリであることを示します。

登録番号	IDコード	題 目	ファイル名	登録番号	IDコード	題 目	ファイル名
4	C2/QU/F/SANJ1	3-DEGREE ALGEBRAIC EQUATION WITH COMPLEX NUMBER COEFFICIENT	P	30	F2/QU/F/SWROS	EIGENVALUE OF SYMMETRIC MATRIX (QR METHOD)	P
57	C2/QC/F/GRAEFS	ALGEBRAIC EQUATION OF HIGHER ORDER (GRAEFFE MODIFY METHOD)	P	31	F2/QU/F/SWROD	EIGENVALUE OF SYMMETRIC MATRIX (QR METHOD)	P
58	C2/QC/F/GRAEFD	ALGEBRAIC EQUATION OF HIGHER ORDER (GRAEFFE MODIFY METHOD)	P	32	F2/QU/F/HWROS	EIGENVALUE OF HERMITIAN MATRIX (QR METHOD)	P
125	C2/QC/F/YONJIS	ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS OF DEGREE 4 (FERRARI'S METHOD)	P	33	F2/QU/F/HWROD	EIGENVALUE OF HERMITIAN MATRIX (QR METHOD)	P
126	C2/QC/F/YONJID	ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS OF DEGREE 4 (FERRARI'S METHOD)	P	43	F2/QU/F/HWRS	EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)	P
7	C3/QU/F/CNDS	CUMULATIVE NORMAL DISTRIBUTION FUNCTION	P	44	F2/QU/F/HWRD	EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)	P
8	C3/QU/F/HCNDS	INVERSE FUNCTION OF CUMULATIVE NORMAL DISTRIBUTION FUNCTION	P	68	F2/QC/F/TDBLS	EIGENVALUE OF TRIDIAGONAL MATRIX (BISECTION METHOD)	P
16	C3/QU/F/GAMMAD	GAMMA FUNCTION	P	69	F2/QC/F/TDBLD	EIGENVALUE OF TRIDIAGONAL MATRIX (BISECTION METHOD)	P
17	C3/QU/F/PRESNL	GENERALIZED FRESNEL INTEGRAL	P	70	F2/QC/F/TDBUS	EIGENVALUE OF TRIDIAGONAL MATRIX (BISECTION METHOD)	P
22	C3/QU/F/DRPGMA	RECIPROCAL OF GAMMA FUNCTION	P	71	F2/QC/F/TUBUD	EIGENVALUE OF TRIDIAGONAL MATRIX (BISECTION METHOD)	P
59	C3/QU/F/DERF	ERROR FUNCTION	P	72	F2/QC/F/TDGRS	EIGENVALUES OF TRIDIAGONAL MATRIX (QR METHOD)	P
65	C3/QU/F/BFTA	BETA FUNCTION	P	73	F2/QC/F/TDWRD	EIGENVALUES OF TRIDIAGONAL MATRIX (QR METHOD)	P
66	C3/QU/F/FBET	INCOMPLETE BETA FUNCTION	P	74	F2/QC/F/SBTRS	TRIDIAGONALIZATION OF REAL SYMMETRIC BAND MATRIX	P
34	C7/QU/F/POWELL	MINIMIZATION OF A FUNCTION	P	75	F2/QC/F/SBTRD	TRIDIAGONALIZATION OF REAL SYMMETRIC BAND MATRIX	P
15	D1/QU/F/ROMBER	ROMBERG'S INTEGRATION WITH ERROR CONTROL	P	76	F2/QC/F/SBVCS	EIGENVECTOR OF REAL SYMMETRIC BAND MATRIX	P
18	D1/QU/F/CGJG	COEFFICIENTS OF GAUSS-JACOBI QUADRATURE FORMULA	P	77	F2/QC/F/SBVCD	EIGENVECTOR OF REAL SYMMETRIC BAND MATRIX	P
19	D1/QU/F/CGLQ	COEFFICIENTS OF GAUSS-LAGUERRE QUADRATURE FORMULA	P	78	F2/QC/F/SBPDFS	REDUCTION OF SYMMETRIC EIGENPROBLEM $ABX = X$	P
20	D1/QU/F/ROMBGS	NUMERICAL INTEGRATION USING ROMBERG'S ALGORITHM	P	79	F2/QC/F/SBPDFD	REDUCTION OF SYMMETRIC EIGENPROBLEM $ABX = X$	P
21	D1/QU/F/ROMBGD	NUMERICAL INTEGRATION USING ROMBERG'S ALGORITHM	P	80	F2/QU/F/SHWS	EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (QR METHOD)	P
*161	D1/QC/F/UBLEXP	DOUBLE EXPONENTIAL FORMULA	P	81	F2/QU/F/SHOD	EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (QR METHOD)	P
67	D2/QU/F/TRANS	ORDINARY DIFFERENTIAL EQUATION (TRAPEZOIDAL RULE WITH AUTOMATIC MODIFICATION)	P	82	F2/QU/F/HWQOS	EIGENVALUE OF HERMITIAN MATRIX (QR METHOD)	P
89	D4/QC/F/DIFF1S	NUMERICAL DIFFERENTIATION OF ANALYTIC FUNCTIONS	P	83	F2/QU/F/HWQOD	EIGENVALUE OF HERMITIAN MATRIX (QR METHOD)	P
90	D4/QC/F/DIFF1D	NUMERICAL DIFFERENTIATION OF ANALYTIC FUNCTIONS	P	84	F2/QU/F/HWQS	EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)	P
23	D6/QC/F/FFTCS	FAST FOURIER TRANSFORM (COMPLEX TRANSFORM)	P	85	F2/QU/F/HWQD	EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)	P
24	D6/QC/F/FFTRS	FAST FOURIER TRANSFORM (REAL TRANSFORM)	P	3	F4/QU/F/SWPML	INVERSE MATRIX AND LINEAR EQUATION (USING DISK OR MT)	P
1	F2/QU/F/HER4	EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX	P				
11	F2/QU/F/SWRS	EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (QR METHOD)	P				
12	F2/QU/F/SWROD	EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (QR METHOD)	P				

9	F4/QU/F/GSRENS	LINEAR EQUATION (GAUSS-SEIDEL METHOD)	P	47	J0/QC/F/GRAPH	PRINT OF GRAPH	P
10	F4/QU/F/GSREND	LINEAR EQUATION (GAUSS-SEIDEL METHOD)	P	48	J0/QC/F/QDLIST	PRINT OF INPUT DATA	P
141	F4/QC/F/LUDECS	LINEAR EQUATION	P	52	J0/QC/F/LETTER	PRINT OF LETTER	P
142	F4/QC/F/LUDECD	LINEAR EQUATION	P	114	J6/QU/F/QNUMB	PLOTTER ROUTINE FOR SPELLING OUT A NUMBER	P
46	G1/QU/Z/CNTGTB	ANALYSIS OF 2*2 CONTINGENCY TABLE	MT	61	K2/QC/F/NBITOP	BIT OPERATION FUNCTION FOR FORTRAN USER	P
115	G2/QC/Z/DRLGTT	REGRESSION ANALYSIS OF DISCRETE DATA BASED ON LOGIT MODEL (DRLGIT)	MT	157	K2/QU/F/BSHIFT	BIT SHIFT	P
145	G2/QC/F/DWREG	REGRESSION ANALYSIS FOR ARBITRARY FUNCTION WITH WEIGHT, DEMING	P	*160	L2/QC/Z/HLISP	HLISP	P
35	G5/QC/F/KUNIRN	UNIFORM RANDOM NUMBER GENERATOR	P	*164	L2/QC/Z/FORDAP	FORDAP	P
127	G5/QC/F/RUTEST	TEST FOR UNIFORM RANDOM NUMBER 1	P	50	M2/QC/F/HENKAN	CODE CONVERSION PROGRAM FOR PTR DATA	P
128	G5/QC/F/RTEST	TEST FOR UNIFORM RANDOM NUMBER 2	P	**168	M2/QC/F/KANA	ROMAN LETTERS TO KANA LETTERS CONVERSION	PT
129	G5/QC/F/RTEST2	TEST FOR UNIFORM RANDOM NUMBER 3	P	116	Q9/QC/F/FLDUMP	FILE DUMP ROUTINE	P
130	G5/QC/F/PTEST	TEST FOR UNIFORM RANDOM NUMBER 4	P	117	Q9/QC/F/FLCOPY	FILE COPY ROUTINE	P
131	G5/QC/F/RWTEST	TEST FOR UNIFORM RANDOM NUMBER 5	P	144	Q9/QC/F/MPQ	BASIC ROUTINE FOR MULTIPRECISION OPERATION	P
132	G5/QC/F/HUN2	UNIFORM RANDOM NUMBER GENERATOR	P	155	Q9/QU/Z/EDITDT	DATA EDITOR FOR DA FILE (EDITDATA)	AE
133	G5/QC/F/RUD2	UNIFORM RANDOM NUMBER GENERATOR (DOUBLE PRECISION)	P	*165	Y0/QC/F/MANYBM	E.M. IMAGE CONTRAST BY MANY BEAM THEORY	AO
134	G5/QC/F/HNO2	NORMAL RANDOM NUMBER GENERATOR	P	91	Y1/QC/Z/RLC3	LATTICE CONSTANTS	MT
60	G6/QU/7/MMRA	NORMAL MULTIVARIATE MULTIPLE REGRESSION ANALYSIS INVOLVING MULTIPLICITY OF POPULATIONS (MMRA)	MT	92	Y1/QC/Z/RW53	DETECTION OF CENTER OF SYMMETRY	MT
87	G6/QC/Z/PCAJCB	PRINCIPAL COMPONENT ANALYSIS (JACOBI METHOD)	MT	93	Y1/QC/Z/ROF3	ONE DIMENSIONAL FOURIER SYNTHESIS	MT
88	G6/QC/7/PCAQR	PRINCIPAL COMPONENT ANALYSIS (QR METHOD)	MT	94	Y1/QC/Z/RDF3	DRAW FIGURE OF ATOMIC POSITIONS	MT
*162	G6/QC/Z/FACEST	FACTOR ANALYSIS-ESTIMATION OF LOADING MATRIX (FAC. EST)	MT	95	Y1/QC/Z/TRCL	TRANSFORMATION OF CRYSTAL SETTING AND SPACE GROUP SYMBOL	MT
*163	G6/QC/7/FACROT	FACTOR ANALYSIS-ORTHOGONAL AND OBLIQUE ROTATION, ESTIMATION OF FACTOR SCORES (FAC. ROT)	MT	96	Y1/QC/Z/AFIU	GENERATE ATOMIC SCATTERING FACTOR TABLE	MT
45	G9/QU/7/EIYOO	STATISTICAL ANALYSIS OF NUTRITIONAL SURVEY DATA (EIYOO)	MT	97	Y1/QC/Z/RJR3	GENERATE OBSERVABLE REFLECTIONS	MT
159	G9/QC/7/SPSS	STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES	MT	98	Y1/QC/Z/INCR	ABSORPTION CORRECTIONS FOR EQUILINCLINATION	MT
55	H1/QC/Z/MINIMX	MINIMAX SOLUTION TO OVERDETERMINED LINEAR SYSTEMS (MINIMAX)	MT	99	Y1/QC/Z/DTP3	GENERAL DATA REDUCTION	MT
56	H1/QC/F/MINMAX	MINIMAX SOLUTION TO OVERDETERMINED LINEAR SYSTEMS	P	100	Y1/QC/Z/OSFD	POWDER DATA REDUCTION	MT
6	H3/QU/Z/SUCPM	CALCULATION OF CPM (SUCPM)	MT	101	Y1/QC/Z/SGMA	E-FACTOR SIGMA-2 LIST	MT
49	I5/QC/F/PTR	INPUT FOR PTR	P	102	Y1/QC/Z/SFR5	STRUCTURE FACTOR AND FOURIER	MT
113	I5/QC/Z/PTRJOB	PAPER TAPE UTILITY FOR FORTRAN (PTR-JOB)	MT	103	Y1/QC/Z/RSSA	STRUCTURE FACTOR	MT
51	I6/QC/F/FRDWT	READ/WRITE ROUTINE FOR GENERAL FILE	P	104	Y1/QC/Z/RDLS	DIAGONAL LEAST SQUARES	MT
54	I6/QU/F/FLDATA	READ/WRITE ROUTINE FOR D.T. FILE WITH ALGOL-H TYPE FORMAT	P	105	Y1/QC/Z/FLS4	FULL MATRIX LEAST SQUARES	MT
2	I9/QU/F/INLIST	INPUT, NON-FORMAT	P	106	Y1/QC/Z/ZHFM	MONTE-CARLO / OPTIMAL-SHIFT	MT
53	I9/QU/F/INDATA	READ ROUTINE WITH ALGOL-H TYPE FORMAT	P	107	Y1/QC/Z/RTE2	R-FACTOR MAP	MT
13	J0/QU/F/MPCTS	PRINT OF COMPLEX MATRIX	P	108	Y1/QC/Z/RBP3	BEST PLANE	MT
14	J0/QU/F/MXPST	PRINT OF REAL MATRIX	P	109	Y1/QC/Z/RDA4	ATOMIC DISTANCE AND ANGLE	MT
42	J0/QU/F/REFORM	OUTPUT WITHOUT FORMAT	P	110	Y1/QC/Z/RMV4	MOLECULAR VIBRATION	MT
				111	Y1/QC/Z/ANSF	ANOMALOUS DISPERSION FOURIER	MT
				112	Y1/QC/Z/HBLS	BLOCK DIAGONAL LEAST SQUARES AND FOURIER	MT
				140	Y1/QU/Z/ORTEP	THERMAL ELLIPSOID PLOT PROGRAM	MT
				143	Y1/QC/Z/EMAP	E-MAP	MT
				146	Y1/QC/Z/APLM	UNIT CELL REFINEMENT AND THEORETICAL REFLECTION	MT
				147	Y1/QU/Z/MULTAN	THE AUTOMATIC SOLUTION OF CRYSTAL STRUCTURE	MT

148 Y1/QU/Z/XEMAPX	E-FACTOR MAP	MT	138 Y3/OC/Z/SHL4	G-TYPE ENERGY MATRIX ELEMENTS IN J-J	A1
149 Y1/OC/Z/TANG	TANGENT FORMULA PROGRAM	MT		COUPLING SHELL MODEL	
150 Y1/QU/Z/DAPH	ATOMIC DISTANCE, ANGLE, PLANE, ETC.	MT	139 Y3/OC/Z/SHL5	F-TYPE(PARTICLE-HOLE) ENERGY MATRIX	A1
151 Y1/OC/Z/ACAC	ABSORPTION CORRECTIONS FOR ARBITRARY	MT		ELEMENTS IN J-J COUPLING SHELL MODEL	
	CRYSTAL		158 Y3/OC/Z/CC010	EFFECTIVE INTERACTION IN NUCLEAR SHELL	A1
25 Y3/OC/Z/AA01	ELASTIC SCATTERING ANALYSIS WITH	MT		MODEL	
	NUCLEAR OPTICAL MODEL (ELASTC)		**166 Y3/OC/Z/VAR1	SCATTERING SOLUTION OF INTEGRO-	A1
26 Y3/OC/Z/AA02	DWBA ANALYSIS OF DIRECT NUCLEAR	MT		DIFFERENTIAL OR INTEGRAL EQUATION BY	
	REACTION 1 (DWBA1)			USING VARIATIONAL PRINCIPLE(I)	
27 Y3/OC/Z/DB01	CLEBSCH-GORDAN COEFFICIENT	A1	**167 Y3/OC/Z/KNL1	KERNELS OF THE ORTHOGONALITY CONDITION	A1
28 Y3/OC/Z/DB02	RACAH COEFFICIENT	A1		MODEL	
29 Y3/OC/Z/DB03	NINE-J SYMBOL	A1	64 Y4/OC/Z/AD05	MOLECULAR INTEGRALS OF CGTO (MICGTO)	MT
36 Y3/OC/Z/AA03	DWBA ANALYSIS OF DIRECT NUCLEAR	MT	86 Y4/OC/Z/GMSCF	ROOTHEAN SCF PROGRAM WITH CGTO BASES	MT
	REACTION 2 (DWBA2)		118 Y4/OC/Z/MVINS	MOLECULAR VIBRATION, DATA INPUT	A0
37 Y3/OC/Z/BA02	NUCLEON-NUCLEON SCATTERING BY R-SPACE	MT	119 Y4/OC/Z/MVBX	COMPOSITION OF B MATRIX	A0
	POTENTIAL (NNS)		120 Y4/OC/Z/MVSYM	SYMMETRIZING OF A MATRIX	A0
38 Y3/OC/Z/CA01	VARIABLE METRIC METHOD FOR	A1	121 Y4/OC/Z/MVRD	INPUT OF A MATRIX	A0
	MINIMIZATION		122 Y4/OC/Z/MVABF	MOLECULAR VIBRATION ANALYSIS(GF METHOD)	A0
39 Y3/OC/Z/DA02	BCS EQUATION	A1	123 Y4/OC/Z/MVOUT	MOLECULAR VIBRATION, RESULTS OUTPUT	A0
40 Y3/OC/Z/DA03	RANDOM PHASE APPROXIMATION (RPA)	MT	124 Y4/OC/Z/MVFRS	FORCE CONSTANTS REFINEMENT WITH LEAST	A0
41 Y3/OC/Z/DB05	MATRIX ELEMENTS OF TENSOR FORCE	A1		SQUARE	
	BETWEEN HARMONIC OSCILLATOR WAVE		152 Y4/OC/Z/HVABF	NORMAL VIBRATION OF HELICAL CHAIN	A0
	FUNCTIONS		153 Y4/OC/Z/HVAUX	AUXILIARY ROUTINE FOR B MATRIX OF	A0
				HELICAL CHAIN	
135 Y3/OC/Z/SHL1	HARMONIC OSCILLATOR WAVE FUNCTION	A1	154 Y4/OC/Z/MVOUTP	MOLECULAR VIBRATION, PED OUTPUT	A0
136 Y3/OC/Z/SHL2	ENERGY MATRIX ELEMENTS BETWEEN HARMONIC	A1	5 Z1/QU/Z/DYSTAL	DYSTAL-DYNAMIC STORAGE ALLOCATION	A2
	OSCILLATOR WAVE FUNCTIONS			LANGUAGE IN FORTRAN	
137 Y3/OC/Z/SHL3	ENERGY MATRIX ELEMENTS IN J-J COUPLING	A1	61 K2/OC/F/NBITOP	BIT OPERATION FUNCTION FOR FORTRAN USER P	
	SHELL MODEL				

2. 富士通作成 SSL FORTRAN

これらのプログラムは、SYS1.FSSLIBのファイルに登録されています。LIEDで使うファイル定義名はF.SSLです。
最新のマニュアルは、FACOM 230-60 SSL(科学用サブルーチンライブラリ)使用方法説明書FORTAN編第7版(資料番号
60301001-7)です。印のあるものは新規に登録されたライブラリです。

分類コード呼び出し名	題 目	分類コード呼び出し名	題 目
B. 一般・特殊関数		B/031/S @KKEES COMPLETE ELLIPTIC INTEGRALS OF THE FIRST AND THE SECOND KIND	
B/001/S CELI1S	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST KIND	B/031/D @KKEED COMPLETE ELLIPTIC INTEGRALS OF THE FIRST AND THE SECOND KIND	
B/002/S CELI2S	COMPLETE ELLIPTIC INTEGRAL OF THE SECOND KIND	B/032/S THETAS ELLIPTIC FUNCTION, THETE FUNCTION	
B/003/D EXPGD	EXPONENTIAL INTEGRAL 1	B/032/D THETAD ELLIPTIC FUNCTION, THETE FUNCTION	
B/004/S GAMANS	GAMMA FUNCTION	B/033/S EJABIS ELLIPTIC FUNCTION, JACOBI'S E-FUNCTION	
B/005/S GAMAIS	GAMMA FUNCTION	B/033/D EJABID ELLIPTIC FUNCTION, JACOBI'S E-FUNCTION	
B/008/S LNKAIS	LOG(NI)	*B/034/S CBESIS MODIFIED BESSEL FUNCTION WITH COMPLEX ARGUMENT OF 1ST KIND	
B/008/D LNKAID	LOG(NI)	*B/034/D CBESID MODIFIED BESSEL FUNCTION WITH COMPLEX ARGUMENT OF 1ST KIND	
B/009/D FRESO	FRESNEL'S INTEGRAL	C. 微積分	
B/010/D SID	SINE INTEGRAL	C/001/S DIFLAS NUMERICAL DIFFERENTIATION (LAGRANGE'S INTERPOLATION)	
B/011/D CID	COSINE INTEGRAL	C/001/D DIFLAD NUMERICAL DIFFERENTIATION (LAGRANGE'S INTERPOLATION)	
B/012/D BESJOD	BESSEL FUNCTION J0(X)	C/002/S SIMPS NUMERICAL INTEGRATION (SIMPSON'S 1/3 RULE)	
B/013/D BESJ1D	BESSEL FUNCTION J1(X)	C/002/D SIMPD NUMERICAL INTEGRATION (SIMPSON'S 1/3 RULE)	
B/014/D BESYOD	BESSEL FUNCTION Y0(X)	C/003/S GAUSSS NUMERICAL INTEGRATION (GAUSSIAN FORMULA)	
B/015/D BESY1D	BESSEL FUNCTION Y1(X)	C/003/D GAUSSD NUMERICAL INTEGRATION (GAUSSIAN FORMULA)	
B/016/D BESIOD	BESSEL FUNCTION I0(X)	C/004/D GAS3D NUMERICAL INTEGRATION (3-POINT GAUSSIAN FORMULA)	
B/017/D BES11D	BESSEL FUNCTION I1(X)	C/005/D GAS4D NUMERICAL INTEGRATION (4-POINT GAUSSIAN FORMULA)	
B/018/D BESKOD	BESSEL FUNCTION K0(X)	C/006/D GAS5D NUMERICAL INTEGRATION (5-POINT GAUSSIAN FORMULA)	
B/019/D BESK1D	BESSEL FUNCTION K1(X)	C/007/D GAS6D NUMERICAL INTEGRATION (6-POINT GAUSSIAN FORMULA)	
B/020/D LEGDD	LEGENDRE'S POLYNOMIAL	C/008/D GAS7D NUMERICAL INTEGRATION (7-POINT GAUSSIAN FORMULA)	
B/021/S BEK1S	POWER SERIES	C/009/D GAS8D NUMERICAL INTEGRATION (8-POINT GAUSSIAN FORMULA)	
B/021/D BEK1D	POWER SERIES	C/010/D GAS9D NUMERICAL INTEGRATION (9-POINT GAUSSIAN FORMULA)	
B/022/S BESJNS	BESSEL FUNCTION JN(X)	C/011/D GAS10D NUMERICAL INTEGRATION (10-POINT GAUSSIAN FORMULA)	
B/022/D BESJND	BESSEL FUNCTION JN(X)	C/012/D GAS12D NUMERICAL INTEGRATION (12-POINT GAUSSIAN FORMULA)	
B/023/S BESYNS	BESSEL FUNCTION YN(X)	C/013/D GAS16D NUMERICAL INTEGRATION (16-POINT GAUSSIAN FORMULA)	
B/023/D BESYND	BESSEL FUNCTION YN(X)	C/014/D GAS24D NUMERICAL INTEGRATION (24-POINT GAUSSIAN FORMULA)	
B/024/S BESINS	BESSEL FUNCTION IN(X)		
B/024/D BESIND	BESSEL FUNCTION IN(X)		
B/025/S BESKNS	BESSEL FUNCTION KN(X)		
B/025/D BESKND	BESSEL FUNCTION KN(X)		
B/026/S CEP12S	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST AND SECOND KINDS		
B/026/D CEP12D	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST AND SECOND KINDS		
B/027/S EXPG2S	EXPONENTIAL INTEGRAL 2		
B/027/D EXPG2D	EXPONENTIAL INTEGRAL 2		
B/028/S HERMIS	HERMITE POLYNOMIALS		
B/028/D HERMID	HERMITE POLYNOMIALS		
B/029/S LAGUES	LAGUERRE POLYNOMIALS		
B/029/D LAGUED	LAGUERRE POLYNOMIALS		
B/030/S JACBIS	JACOBI POLYNOMIALS		
B/030/D JACBID	JACOBI POLYNOMIALS		

C/015/D GAS32D NUMERICAL INTEGRATION
 (32-POINT GAUSSIAN FORMULA)
 C/016/S SIMP1S NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT 1)
 C/016/D SIMP1D NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT 1)
 C/017/S GSL4S NUMERICAL INTEGRATION
 (4-POINT GAUSS-LAGUERRE FORMULA)
 C/018/S GSL5S NUMERICAL INTEGRATION
 (5-POINT GAUSS-LAGUERRE FORMULA)
 C/019/S GSL6S NUMERICAL INTEGRATION
 (6-POINT GAUSS-LAGUERRE FORMULA)
 C/020/S GSL7S NUMERICAL INTEGRATION
 (7-POINT GAUSS-LAGUERRE FORMULA)
 C/021/S GSL8S NUMERICAL INTEGRATION
 (8-POINT GAUSS-LAGUERRE FORMULA)
 C/022/S GSL9S NUMERICAL INTEGRATION
 (9-POINT GAUSS-LAGUERRE FORMULA)
 C/023/S GSL10S NUMERICAL INTEGRATION
 (10-POINT GAUSS-LAGUERRE FORMULA)
 C/023/D GSL10D NUMERICAL INTEGRATION
 (10-POINT GAUSS-LAGUERRE FORMULA)
 C/024/S GSL11S NUMERICAL INTEGRATION
 (11-POINT GAUSS-LAGUERRE FORMULA)
 C/024/D GSL11D NUMERICAL INTEGRATION
 (11-POINT GAUSS-LAGUERRE FORMULA)
 C/025/S GSL12S NUMERICAL INTEGRATION
 (12-POINT GAUSS-LAGUERRE FORMULA)
 C/025/D GSL12D NUMERICAL INTEGRATION
 (12-POINT GAUSS-LAGUERRE FORMULA)
 C/026/S GSL13S NUMERICAL INTEGRATION
 (13-POINT GAUSS-LAGUERRE FORMULA)
 C/026/D GSL13D NUMERICAL INTEGRATION
 (13-POINT GAUSS-LAGUERRE FORMULA)
 C/027/S GSL14S NUMERICAL INTEGRATION
 (14-POINT GAUSS-LAGUERRE FORMULA)
 C/027/D GSL14D NUMERICAL INTEGRATION
 (14-POINT GAUSS-LAGUERRE FORMULA)
 C/028/S GSL15S NUMERICAL INTEGRATION
 (15-POINT GAUSS-LAGUERRE FORMULA)
 C/028/D GSL15D NUMERICAL INTEGRATION
 (15-POINT GAUSS-LAGUERRE FORMULA)
 C/029/D GSL16D NUMERICAL INTEGRATION
 (16-POINT GAUSS-LAGUERRE FORMULA)
 C/030/D GSL17D NUMERICAL INTEGRATION
 (17-POINT GAUSS-LAGUERRE FORMULA)
 C/031/D GSL18D NUMERICAL INTEGRATION
 (18-POINT GAUSS-LAGUERRE FORMULA)
 C/032/D GSL19D NUMERICAL INTEGRATION
 (19-POINT GAUSS-LAGUERRE FORMULA)

C/033/D GSL20D NUMERICAL INTEGRATION
 (20-POINT GAUSS-LAGUERRE FORMULA)
 C/034/D GSL21D NUMERICAL INTEGRATION
 (21-POINT GAUSS-LAGUERRE FORMULA)
 C/035/D GSL22D NUMERICAL INTEGRATION
 (22-POINT GAUSS-LAGUERRE FORMULA)
 C/036/D GSL23D NUMERICAL INTEGRATION
 (23-POINT GAUSS-LAGUERRE FORMULA)
 C/037/D GSL24D NUMERICAL INTEGRATION
 (24-POINT GAUSS-LAGUERRE FORMULA)
 C/038/D GSL25D NUMERICAL INTEGRATION
 (25-POINT GAUSS-LAGUERRE FORMULA)
 C/039/D GSL26D NUMERICAL INTEGRATION
 (26-POINT GAUSS-LAGUERRE FORMULA)
 C/040/S GSH7S NUMERICAL INTEGRATION
 (7-POINT GAUSS-HERMITE FORMULA)
 C/041/S GSH8S NUMERICAL INTEGRATION
 (8-POINT GAUSS-HERMITE FORMULA)
 C/042/S GSH9S NUMERICAL INTEGRATION
 (9-POINT GAUSS-HERMITE FORMULA)
 C/043/S GSH10S NUMERICAL INTEGRATION
 (10-POINT GAUSS-HERMITE FORMULA)
 C/043/D GSH10D NUMERICAL INTEGRATION
 (10-POINT GAUSS-HERMITE FORMULA)
 C/044/S GSH11S NUMERICAL INTEGRATION
 (11-POINT GAUSS-HERMITE FORMULA)
 C/044/D GSH11D NUMERICAL INTEGRATION
 (11-POINT GAUSS-HERMITE FORMULA)
 C/045/S GSH12S NUMERICAL INTEGRATION
 (12-POINT GAUSS-HERMITE FORMULA)
 C/045/D GSH12D NUMERICAL INTEGRATION
 (12-POINT GAUSS-HERMITE FORMULA)
 C/046/S GSH13S NUMERICAL INTEGRATION
 (13-POINT GAUSS-HERMITE FORMULA)
 C/046/D GSH13D NUMERICAL INTEGRATION
 (13-POINT GAUSS-HERMITE FORMULA)
 C/047/S GSH14S NUMERICAL INTEGRATION
 (14-POINT GAUSS-HERMITE FORMULA)
 C/047/D GSH14D NUMERICAL INTEGRATION
 (14-POINT GAUSS-HERMITE FORMULA)
 C/048/S GSH15S NUMERICAL INTEGRATION
 (15-POINT GAUSS-HERMITE FORMULA)
 C/048/D GSH15D NUMERICAL INTEGRATION
 (15-POINT GAUSS-HERMITE FORMULA)
 C/049/D GSH16D NUMERICAL INTEGRATION
 (16-POINT GAUSS-HERMITE FORMULA)
 C/050/D GSH17D NUMERICAL INTEGRATION
 (17-POINT GAUSS-HERMITE FORMULA)
 C/051/D GSH18D NUMERICAL INTEGRATION
 (18-POINT GAUSS-HERMITE FORMULA)

C/052/D GSH19D NUMERICAL INTEGRATION
 (19-POINT GAUSS-HERMITE FORMULA)
 C/053/D GSH20D NUMERICAL INTEGRATION
 (20-POINT GAUSS-HERMITE FORMULA)
 C/054/D GSH21D NUMERICAL INTEGRATION
 (21-POINT GAUSS-HERMITE FORMULA)
 C/055/D GSH22D NUMERICAL INTEGRATION
 (22-POINT GAUSS-HERMITE FORMULA)
 C/056/D GSH23D NUMERICAL INTEGRATION
 (23-POINT GAUSS-HERMITE FORMULA)
 C/057/D GSH24D NUMERICAL INTEGRATION
 (24-POINT GAUSS-HERMITE FORMULA)
 C/058/D GSH25D NUMERICAL INTEGRATION
 (25-POINT GAUSS-HERMITE FORMULA)
 C/059/D GSH26D NUMERICAL INTEGRATION
 (26-POINT GAUSS-HERMITE FORMULA)
 C/060/D GSH27D NUMERICAL INTEGRATION
 (27-POINT GAUSS-HERMITE FORMULA)
 C/061/D GSH28D NUMERICAL INTEGRATION
 (28-POINT GAUSS-HERMITE FORMULA)
 C/062/D GSH29D NUMERICAL INTEGRATION
 (29-POINT GAUSS-HERMITE FORMULA)
 C/063/D GSH30D NUMERICAL INTEGRATION
 (30-POINT GAUSS-HERMITE FORMULA)
 C/064/D GSH31D NUMERICAL INTEGRATION
 (31-POINT GAUSS-HERMITE FORMULA)
 C/065/S SIMP2S NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT WITH
 NON-EQUAL INTERVALS)
 C/065/D SIMP2D NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT WITH
 NON-EQUAL INTERVALS)
 C/066/S SIMPFS NUMERICAL INTEGRATION IN HALF INFINITE
 INTERVAL (SIMPSON'S 1/3 RULE)
 C/066/D SIMPFD NUMERICAL INTEGRATION IN HALF INFINITE
 INTERVAL (SIMPSON'S 1/3 RULE)
 C/067/S MSIMPS NUMERICAL INTEGRATION
 (DOUBLE INTERVAL, SIMPSON'S 1/3 RULE)
 C/067/D MSIMPD NUMERICAL INTEGRATION
 (DOUBLE INTERVAL, SIMPSON'S 1/3 RULE)
 C/068/S MGAUSS NUMERICAL INTEGRATION
 (DOUBLE INTERVAL, GAUSS-LEGENDER FORMULA)
 C/068/D MGAUSD NUMERICAL INTEGRATION
 (DOUBLE INTERVAL, GAUSS-LEGENDER FORMULA)
 D. 代数方程式
 D/001/S CARDNS ALGEBRAIC EQUATION OF DEGREE 3 (CARDANO'S
 METHOD)
 D/001/D CARDND ALGEBRAIC EQUATION OF DEGREE 3 (CARDANO'S
 METHOD)

D/002/S FERRAS ALGEBRAIC EQUATION OF DEGREE 4 (FERRARI'S
 METHOD)
 D/002/D FERRAD ALGEBRAIC EQUATION OF DEGREE 4 (FERRARI'S
 METHOD)
 D/003/S BAIRIS ALGEBRAIC EQUATION (BAIRSTOW'S METHOD)
 D/003/D BAIRID ALGEBRAIC EQUATION (BAIRSTOW'S METHOD)
 *D/003/Q BAIRIQ ALGEBRAIC EQUATION (BAIRSTOW'S METHOD)
 (QUADRUPLE)
 D/004/S REGFLS ALGEBRAIC EQUATION (REGULA-FALSI METHOD)
 D/004/D REGFLD ALGEBRAIC EQUATION (REGULA-FALSI METHOD)
 D/005/S CNWTNS ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
 (NEWTON-RAPHSON METHOD)
 D/005/D CNWTND ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
 (NEWTON-RAPHSON METHOD)
 D/006/S JARATS ALGEBRAIC EQUATION (JARRATT'S MODIFIED
 METHOD)
 D/006/D JARATD ALGEBRAIC EQUATION (JARRATT'S MODIFIED
 METHOD)
 D/007/S CJARTS ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
 (JARAT'S METHOD)
 D/007/D CJARTD ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
 (JARAT'S METHOD)
 D/008/S CTRNCS TRANSCENDENTAL EQUATION WITH COMPLEX
 COEFFICIENTS
 D/008/D CTRNCD TRANSCENDENTAL EQUATION WITH COMPLEX
 COEFFICIENTS
 D/009/S NONLES THE SOLUTION OF SYSTEMS OF NON-LINEAR EQUATIONS
 D/009/D NONLED THE SOLUTION OF SYSTEMS OF NON-LINEAR EQUATIONS
 *D/010/S SOAENS ALGEBRAIC EQUATION OF DEGREE 2,3,4 AND 5 WITH
 REAL COEFFICIENTS
 *D/010/D SOAEND ALGEBRAIC EQUATION OF DEGREE 2,3,4 AND 5 WITH
 REAL COEFFICIENTS
 E. 連立一次方程式
 E/001/S GAUSES LINEAR EQUATIONS (GAUSS-SEIDEL METHOD)
 E/001/D GAUDED LINEAR EQUATIONS (GAUSS-SEIDEL METHOD)
 E/002/S GAUELS LINEAR EQUATIONS (GAUSS ELIMINATION METHOD)
 E/002/D GAUELD LINEAR EQUATIONS (GAUSS ELIMINATION METHOD)
 *E/002/Q GAUELQ LINEAR EQUATIONS (GAUSS ELIMINATION METHOD)
 (QUADRUPLE)
 E/003/S SWEEPS LINEAR EQUATIONS (SWEEP OUT METHOD)
 E/003/D SWEEP D LINEAR EQUATIONS (SWEEP OUT METHOD)
 E/004/S CSWEPS LINEAR EQUATIONS WITH COMPLEX COEFFICIENTS
 (SWEEP OUT METHOD)
 E/004/D CSWEPD LINEAR EQUATIONS WITH COMPLEX COEFFICIENTS
 (SWEEP OUT METHOD)
 E/005/S TRIDGS TRIDIAGONAL EQUATIONS (GAUSS'S ELIMINATION
 METHOD)
 E/006/S SIMEQS LINEAR EQUATIONS AND DETERMINANTS (SWEEP OUT
 METHOD)

E/006/D SIMEQD LINEAR EQUATIONS AND DETERMINANTS (SWEEP OUT METHOD)
 E/007/S LA2ORS LINEAR EQUATIONS, LEAST SQUARES
 E/007/D LA2ORD LINEAR EQUATIONS, LEAST SQUARES
 *E/008/S CHOLCS LINEAR EQUATIONS, POSITIVE DEFINITE REAL SYMMETRIC MATRIX (MODIFIED CHOLESKY METHOD)
 *E/008/D CHOLED LINEAR EQUATIONS, POSITIVE DEFINITE REAL SYMMETRIC MATRIX (MODIFIED CHOLESKY METHOD)
 *E/009/S CHLSKS LINEAR EQUATIONS, POSITIVE DEFINITE REAL SYMMETRIC MATRIX (MODIFIED CHOLESKY, CONDENSE MODE)
 *E/009/D CHLSKD LINEAR EQUATIONS, POSITIVE DEFINITE REAL SYMMETRIC MATRIX (MODIFIED CHOLESKY, CONDENSE MODE)
 *E/010/S BCHSKS LINEAR EQUATIONS, BAND OR SPARSE MATRIX (MODIFIED CHOLESKY, BAND WIDTH REDUCTION)
 *E/011/S SCHSKS LINEAR EQUATIONS, SPARSE MATRIX (MODIFIED CHOLESKY, OPTIMUM ORDERING)
 *E/012/S BANDS LINEAR EQUATIONS, BAND MATRIX (MODIFIED CHOLESKY)
 *E/012/D BANDD LINEAR EQUATIONS, BAND MATRIX (MODIFIED CHOLESKY)

F. 常微分方程式.

F/001/S RKGS ORDINARY DIFFERENTIAL EQUATION (RUNGE-KUTTA-GILL METHOD)
 F/001/D RKGD ORDINARY DIFFERENTIAL EQUATION (RUNGE-KUTTA-GILL METHOD)
 F/002/S SRKGS SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD)
 F/002/D SRKGD SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD)
 F/003/S SRKG2S SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD, WITH CHANGING INTERVAL AUTOMATICALLY)
 F/003/D SRKG2D SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD, WITH CHANGING INTERVAL AUTOMATICALLY)
 F/004/S HAMPCS SYSTEM OF SIMULTANEOUS ORDINARY DIFFERENTIAL EQUATIONS (HAMMING'S METHOD)
 F/004/D HAMPCD SYSTEM OF SIMULTANEOUS ORDINARY DIFFERENTIAL EQUATIONS (HAMMING'S METHOD)

G. 行列

G/001/S MADD5 MATRIX ADDITION
 G/001/D MADD0 MATRIX ADDITION
 G/002/S MSUBS MATRIX SUBTRACTION
 G/002/D MSUB0 MATRIX SUBTRACTION
 G/003/S MMUL1S MATRIX MULTIPLICATION 1
 G/003/D MMUL10 MATRIX MULTIPLICATION 1

G/004/S MMUL2S MATRIX MULTIPLICATION 2
 G/004/D MMUL2D MATRIX MULTIPLICATION 2
 G/005/S MTRNSS MATRIX TRANSPOSITION
 G/005/D MTRNSD MATRIX TRANSPOSITION
 G/006/S MUNITS UNIT MATRIX
 G/006/D MUNITD UNIT MATRIX
 G/007/S MPRTS MATRIX PRINT
 G/007/D MPRTD MATRIX PRINT
 G/008/S MDETS DETERMINANT
 G/008/D MDETD DETERMINANT
 *G/008/Q MDETQ DETERMINANT (QUADRUPLE)
 G/009/S MINVS MATRIX INVERSION (SWEEP OUT METHOD)
 G/009/D MINVD MATRIX INVERSION (SWEEP OUT METHOD)
 *G/009/Q MINVQ MATRIX INVERSION (SWEEP OUT METHOD) (QUADRUPLE)
 G/010/S JACOBS EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (THRESHOLD-JACOBI METHOD)
 G/010/D JACOB0 EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (THRESHOLD-JACOBI METHOD)
 *G/010/Q JACOBQ EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (THRESHOLD-JACOBI METHOD) (QUADRUPLE)
 G/013/S HERMTS EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX
 G/013/D HERMTD EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX
 G/014/S DABAS EIGENVALUES OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/014/D DABAD EIGENVALUES OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/015/S DANews EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/015/D DANewD EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/016/S EVECS EIGENVECTORS OF REAL MATRIX (SWEEP OUT METHOD)
 G/016/D EVECD EIGENVECTORS OF REAL MATRIX (SWEEP OUT METHOD)
 G/017/S HOUSS EIGENVALUES OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/017/D HOUSD EIGENVALUES OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/018/S HESORS EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (QR METHOD)
 G/018/D HESORD EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (QR METHOD)
 *G/018/Q HESORQ EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (QR METHOD) (QUADRUPLE)
 G/019/S HOUS2S EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/019/D HOUS2D EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)

G/020/S @REGNS EIGENVALUES OF REAL MATRIX (@R METHOD)
G/020/D @REGND EIGENVALUES OF REAL MATRIX (@R METHOD)
G/021/S GAVECS EIGENVECTORS OF REAL MATRIX (INVERSE
ITERATION METHOD)
G/021/D GAVECD EIGENVECTORS OF REAL MATRIX (INVERSE
ITERATION METHOD)
G/022/S MINV2S MATRIX INVERSION WITH SCALING
G/022/D MINV2D MATRIX INVERSION WITH SCALING
G/023/S GAVE2S RIGHT HAND SIDE AND LEFT HAND SIDE
EIGENVECTORS OF REAL MATRIX (INVERSE
ITERATION METHOD)
G/023/D GAVE2D RIGHT HAND SIDE AND LEFT HAND SIDE
EIGENVECTORS OF REAL MATRIX (INVERSE
ITERATION METHOD)
G/024/S CHSQRS EIGENVALUES AND EIGENVECTORS OF COMPLEX
MATRIX (@R METHOD)
G/024/D CHSQRD EIGENVALUES AND EIGENVECTORS OF COMPLEX
MATRIX (@R METHOD)
G/025/S THJACS EIGENVALUES AND EIGENVECTORS OF HERMITIAN
MATRIX (THRESHOLD JACOBI METHOD)
G/025/D THJACD EIGENVALUES AND EIGENVECTORS OF HERMITIAN
MATRIX (THRESHOLD JACOBI METHOD)
G/026/S HMTQRS EIGENVALUES AND EIGENVECTORS OF HERMITIAN
MATRIX (@R METHOD)
G/026/D HMTQRD EIGENVALUES AND EIGENVECTORS OF HERMITIAN
MATRIX (@R METHOD)
G/027/S GEIGNS THE GENERALIZED SYMMETRIC EIGENVALUE PROBLEMS,
AX=LAMDA*Bx (@R METHOD, INVERSE ITERATION)
G/027/D GEIGND THE GENERALIZED SYMMETRIC EIGENVALUE PROBLEMS,
AX=LAMDA*Bx (@R METHOD, INVERSE ITERATION)
*G/028/S SMINVS MATRIX INVERSION, POSITIVE DEFINITE REAL
SYMMETRIC MATRIX (SWEEP OUT METHOD)
*G/028/D SMINVD MATRIX INVERSION, POSITIVE DEFINITE REAL
SYMMETRIC MATRIX (SWEEP OUT METHOD)
*G/029/S GMINVS GENERALIZED INVERSE OF MATRIX (GRAM-SCHMIDT
ORTHOGONALIZATION)
*G/029/D GMINVD GENERALIZED INVERSE OF MATRIX (GRAM-SCHMIDT
ORTHOGONALIZATION)
H. フーリエ級数
H/001/D COFOD COSINE ANALYSIS OF FOURIER SERIES
H/002/D SIFOD SINE ANALYSIS OF FOURIER SERIES
H/003/D COASSD COSINE SYNTHESIS OF FOURIER SERIES
H/004/D SIASSD SINE SYNTHESIS OF FOURIER SERIES
H/005/S FFTS COMPLEX FOURIER TRANSFORM AND INVERSE TRANSFORM
H/005/D FFTD COMPLEX FOURIER TRANSFORM AND INVERSE TRANSFORM
*H/006/S FFTMXS COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 2 (MIX-BASE)
*H/006/D FFTMXD COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 2 (MIX-BASE)

*H/007/S FFTBS COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 3 (2.8-BASE)
*H/007/D FFTBD COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 3 (2.8-BASE)
*H/008/S FFTNOS COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 4 (2.8-BASE, SCRAMBLED OUTPUT)
*H/008/D FFTNOD COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 4 (2.8-BASE, SCRAMBLED OUTPUT)
*H/009/S FFTRBS COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 5 (2.8-BASE, SCRAMBLED INPUT)
*H/009/D FFTRBD COMPLEX FOURIER TRANSFORM AND INVERSE
TRANSFORM 5 (2.8-BASE, SCRAMBLED INPUT)
*H/010/S BTRNSS BIT REVERSAL SUBROUTINE
*H/010/D BTRNSD BIT REVERSAL SUBROUTINE
*H/011/S RTRNSS DATA TRANSFORMATION FOR REAL FOURIER TRANSFORM
*H/011/D RTRNSD DATA TRANSFORMATION FOR REAL FOURIER TRANSFORM

I. 関数近似

1/001/D LSTSOD POLYNOMIAL APPROXIMATION BY LEAST SQUARE
1/002/D BSTAPD BEST APPROXIMATION
1/003/S LAGS LAGRANGE'S INTERPOLATION
1/003/D LAGD LAGRANGE'S INTERPOLATION
*1/003/S LAGQ LAGRANGE'S INTERPOLATION (QUADRUPLER)
1/005/S CHEBS TCHEBYSHEV APPROXIMATION (COMPUTE THE
TCHEBYSHEV COEFFICIENTS)
1/005/D CHEBD TCHEBYSHEV APPROXIMATION (COMPUTE THE
TCHEBYSHEV COEFFICIENTS)
1/006/S TINTS TCHEBYSHEV APPROXIMATION (COMPUTE THE
FUNCTION VALUE BY USING TCHEBYSHEV
COEFFICIENTS)
1/006/D TINTD TCHEBYSHEV APPROXIMATION (COMPUTE THE
FUNCTION VALUE BY USING TCHEBYSHEV
COEFFICIENTS)
1/007/S SPLINS SPLINE INTERPOLATION
1/007/D SPLIND SPLINE INTERPOLATION
1/008/S CHBAPS RATIONAL APPROXIMATION BY CHEBYSHEV'S
POLYNOMIAL
1/008/D CHBAPD RATIONAL APPROXIMATION BY CHEBYSHEV'S
POLYNOMIAL
1/009/S CHBCFS BEST APPROXIMATION BY CHEBYSHEV'S POLYNOMIAL,
DISCRETE DATA
1/009/D CHBCFD BEST APPROXIMATION BY CHEBYSHEV'S POLYNOMIAL,
DISCRETE DATA
1/010/S CNFRS RATIONAL APPROXIMATION BY CONTINUED FRACTION,
DISCRETE DATA
1/010/D CNFRD RATIONAL APPROXIMATION BY CONTINUED FRACTION,
DISCRETE DATA
*1/011/D LSMTRD LEAST SQUARE APPROXIMATION WITH DATA REDUCTION

J. 偏微分方程式

J/001/S ELPDES PARTIAL DIFFERENTIAL EQUATION OF ELLIPTIC
TYPE
J/002/S PAPDES PARTIAL DIFFERENTIAL EQUATION OF PARABOLIC
TYPE
J/002/D PAPDED PARTIAL DIFFERENTIAL EQUATION OF PARABOLIC
TYPE
J/003/S HYPDES PARTIAL DIFFERENTIAL EQUATION OF HYPERBOLIC
TYPE
J/003/D HYPDED PARTIAL DIFFERENTIAL EQUATION OF HYPERBOLIC
TYPE

K. 積分方程式

K/001/S INEV2S VOLTERRA'S INTEGRAL EQUATION OF SECOND KIND
K/001/D INEV2D VOLTERRA'S INTEGRAL EQUATION OF SECOND KIND

Z. その他

Z/001/S POADDS ADDITION OF POLYNOMIALS
Z/001/D POADDD ADDITION OF POLYNOMIALS
Z/002/S POSUBS SUBTRACTION OF POLYNOMIALS
Z/002/D POSUBD SUBTRACTION OF POLYNOMIALS
Z/003/S POMULS MULTIPLICATION OF POLYNOMIALS
Z/003/D POMULD MULTIPLICATION OF POLYNOMIALS
Z/004/S PODIVS DIVISION OF POLYNOMIALS
Z/004/D PODIVD DIVISION OF POLYNOMIALS
Z/006/S NORRNS NORMAL RANDOM NUMBERS
Z/007/S POISNS POISSON RANDOM NUMBERS
Z/009/S COMBS BINOMIAL COEFFICIENTS
Z/009/D COMBD BINOMIAL COEFFICIENTS
Z/010/S DAVIDS MINIMIZATION OF FUNCTION DERIVATIVE
Z/010/D DAVIDD MINIMIZATION OF FUNCTION DERIVATIVE
SYMMETRIC MATRIX (SWEEP OUT METHOD)

3.富士通作成 SSL ALGOL

これらのプログラムは、SYS1. ASSLIBのファイルに登録されています。LIEDで使うファイル定義名はA. SSLです。

最新のマニュアルは、FACOM 230-60 SSL (科学用サブライブラリ) 使用方法解説書ALGOL編第5版 (資料番号60301002-5)です。

分類コード	呼び出し名	題 目	分類コード	呼び出し名	題 目
B. 一般・特殊関数					
B/001/A	CEL11A	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST KIND	B/029/A	LAGUEA	LAGUERRE POLYNOMIALS
B/002/A	CEL12A	COMPLETE ELLIPTIC INTEGRAL OF THE SECOND KIND	B/029/B	LAGUEB	LAGUERRE POLYNOMIALS
B/003/B	EXPGB	EXPONENTIAL INTEGRAL 1	B/030/A	JACBIA	JACOBI POLYNOMIALS
B/004/A	GAMMNA	GAMMA FUNCTION	B/030/B	JACBIB	JACOBI POLYNOMIALS
B/005/A	GAMMAA	GAMMA FUNCTION	B/031/A	@KKEEA	COMPLETE ELLIPTIC INTEGRALS OF THE FIRST AND THE SECOND KIND
B/006/A	ERFA	ERROR FUNCTION	B/031/B	@KKEEB	COMPLETE ELLIPTIC INTEGRALS OF THE FIRST AND THE SECOND KIND
B/006/B	ERFB	ERROR FUNCTION	B/032/A	THETAA	ELLIPTIC FUNCTION, THETE FUNCTION
B/007/S	ERFCA	ERROR FUNCTION	B/032/B	THETAB	ELLIPTIC FUNCTION, THETE FUNCTION
B/007/B	ERFCB	ERROR FUNCTION	B/033/A	EJABIA	ELLIPTIC FUNCTION, JACOBI'S E-FUNCTION
B/008/A	LNKAIA	LOG(N!)	B/033/B	EJABIB	ELLIPTIC FUNCTION, JACOBI'S E-FUNCTION
B/008/B	LNKAIB	LOG(N!)	C. 微積分		
B/009/B	FRESB	FRESNEL'S INTEGRAL	C/001/A	DIFLAA	NUMERICAL DIFFERENTIATION (LAGRANGE'S INTERPOLATION)
B/010/B	SIB	SINE INTEGRAL	C/001/B	DIFLAB	NUMERICAL DIFFERENTIATION (LAGRANGE'S INTERPOLATION)
B/011/B	CIB	COSINE INTEGRAL	C/002/A	SIMPA	NUMERICAL INTEGRATION (SIMPSON'S 1/3 RULE)
B/012/B	BESJ0B	BESSEL FUNCTION J ₀ (X)	C/002/B	SIMPB	NUMERICAL INTEGRATION (SIMPSON'S 1/3 RULE)
B/013/B	BESJ1B	BESSEL FUNCTION J ₁ (X)	C/003/A	GAUSSA	NUMERICAL INTEGRATION (GAUSSIAN FORMULA)
B/014/B	BESY0B	BESSEL FUNCTION Y ₀ (X)	C/003/B	GAUSSB	NUMERICAL INTEGRATION (GAUSSIAN FORMULA)
B/015/B	BESY1B	BESSEL FUNCTION Y ₁ (X)	C/004/B	GAS3B	NUMERICAL INTEGRATION (3-POINT GAUSSIAN FORMULA)
B/016/B	BES10B	BESSEL FUNCTION I ₀ (X)	C/005/B	GAS4B	NUMERICAL INTEGRATION (4-POINT GAUSSIAN FORMULA)
B/017/B	BES11B	BESSEL FUNCTION I ₁ (X)	C/006/B	GAS5B	NUMERICAL INTEGRATION (5-POINT GAUSSIAN FORMULA)
B/018/B	BESK0B	BESSEL FUNCTION K ₀ (X)	C/007/B	GAS6B	NUMERICAL INTEGRATION (6-POINT GAUSSIAN FORMULA)
B/019/B	BESK1B	BESSEL FUNCTION K ₁ (X)	C/008/B	GAS7B	NUMERICAL INTEGRATION (7-POINT GAUSSIAN FORMULA)
B/020/B	LEGDB	LEGENDRE'S POLYNOMIAL	C/009/B	GAS8B	NUMERICAL INTEGRATION (8-POINT GAUSSIAN FORMULA)
B/021/A	BEK1A	POWER SERIES	C/010/B	GAS9B	NUMERICAL INTEGRATION (9-POINT GAUSSIAN FORMULA)
B/021/B	BEK1B	POWER SERIES	C/011/B	GAS10B	NUMERICAL INTEGRATION (10-POINT GAUSSIAN FORMULA)
B/022/A	BESJNA	BESSEL FUNCTION J _N (X)	C/012/B	GAS12B	NUMERICAL INTEGRATION (12-POINT GAUSSIAN FORMULA)
B/022/B	BESJNB	BESSEL FUNCTION J _N (X)	C/013/B	GAS16B	NUMERICAL INTEGRATION (16-POINT GAUSSIAN FORMULA)
B/023/A	BESYNA	BESSEL FUNCTION Y _N (X)	C/014/B	GAS24B	NUMERICAL INTEGRATION (24-POINT GAUSSIAN FORMULA)
B/023/B	BESYNB	BESSEL FUNCTION Y _N (X)			
B/024/A	BES1NA	BESSEL FUNCTION I _N (X)			
B/024/B	BES1NB	BESSEL FUNCTION I _N (X)			
B/025/A	BESKNA	BESSEL FUNCTION K _N (X)			
B/025/B	BESKNB	BESSEL FUNCTION K _N (X)			
B/026/A	CEP12A	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST AND SECOND KINDS			
B/026/B	CEP12B	COMPLETE ELLIPTIC INTEGRAL OF THE FIRST AND SECOND KINDS			
B/027/A	EXPGB2A	EXPONENTIAL INTEGRAL 2			
B/027/B	EXPGB2B	EXPONENTIAL INTEGRAL 2			
B/028/A	HERM1A	HERMITE POLYNOMIALS			
B/028/B	HERM1B	HERMITE POLYNOMIALS			

C/015/B GAS32B NUMERICAL INTEGRATION
 (32-POINT GAUSSIAN FORMULA)
 C/016/A SIMP1A NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT 1)
 C/016/B SIMP1B NUMERICAL INTEGRATION
 (SIMPSON'S 1/3 RULE, DIGITAL INPUT 1)
 C/017/A GSL4A NUMERICAL INTEGRATION
 (4-POINT GAUSS-LAGUERRE FORMULA)
 C/018/A GSL5A NUMERICAL INTEGRATION
 (5-POINT GAUSS-LAGUERRE FORMULA)
 C/019/A GSL6A NUMERICAL INTEGRATION
 (6-POINT GAUSS-LAGUERRE FORMULA)
 C/020/A GSL7A NUMERICAL INTEGRATION
 (7-POINT GAUSS-LAGUERRE FORMULA)
 C/021/A GSL8A NUMERICAL INTEGRATION
 (8-POINT GAUSS-LAGUERRE FORMULA)
 C/022/A GSL9A NUMERICAL INTEGRATION
 (9-POINT GAUSS-LAGUERRE FORMULA)
 C/023/A GSL10A NUMERICAL INTEGRATION
 (10-POINT GAUSS-LAGUERRE FORMULA)
 C/023/B GSL10B NUMERICAL INTEGRATION
 (10-POINT GAUSS-LAGUERRE FORMULA)
 C/024/A GSL11A NUMERICAL INTEGRATION
 (11-POINT GAUSS-LAGUERRE FORMULA)
 C/024/B GSL11B NUMERICAL INTEGRATION
 (11-POINT GAUSS-LAGUERRE FORMULA)
 C/025/A GSL12A NUMERICAL INTEGRATION
 (12-POINT GAUSS-LAGUERRE FORMULA)
 C/025/B GSL12B NUMERICAL INTEGRATION
 (12-POINT GAUSS-LAGUERRE FORMULA)
 C/026/A GSL13A NUMERICAL INTEGRATION
 (13-POINT GAUSS-LAGUERRE FORMULA)
 C/026/B GSL13B NUMERICAL INTEGRATION
 (13-POINT GAUSS-LAGUERRE FORMULA)
 C/027/A GSL14A NUMERICAL INTEGRATION
 (14-POINT GAUSS-LAGUERRE FORMULA)
 C/027/B GSL14B NUMERICAL INTEGRATION
 (14-POINT GAUSS-LAGUERRE FORMULA)
 C/028/A GSL15A NUMERICAL INTEGRATION
 (15-POINT GAUSS-LAGUERRE FORMULA)
 C/028/B GSL15B NUMERICAL INTEGRATION
 (15-POINT GAUSS-LAGUERRE FORMULA)
 C/029/B GSL16B NUMERICAL INTEGRATION
 (16-POINT GAUSS-LAGUERRE FORMULA)
 C/030/B GSL17B NUMERICAL INTEGRATION
 (17-POINT GAUSS-LAGUERRE FORMULA)
 C/031/B GSL18B NUMERICAL INTEGRATION
 (18-POINT GAUSS-LAGUERRE FORMULA)
 C/032/B GSL19B NUMERICAL INTEGRATION
 (19-POINT GAUSS-LAGUERRE FORMULA)

C/033/B GSL20B NUMERICAL INTEGRATION
 (20-POINT GAUSS-LAGUERRE FORMULA)
 C/034/B GSL21B NUMERICAL INTEGRATION
 (21-POINT GAUSS-LAGUERRE FORMULA)
 C/035/B GSL22B NUMERICAL INTEGRATION
 (22-POINT GAUSS-LAGUERRE FORMULA)
 C/036/B GSL23B NUMERICAL INTEGRATION
 (23-POINT GAUSS-LAGUERRE FORMULA)
 C/037/B GSL24B NUMERICAL INTEGRATION
 (24-POINT GAUSS-LAGUERRE FORMULA)
 C/038/B GSL25B NUMERICAL INTEGRATION
 (25-POINT GAUSS-LAGUERRE FORMULA)
 C/039/B GSL26B NUMERICAL INTEGRATION
 (26-POINT GAUSS-LAGUERRE FORMULA)
 C/040/A GSH7A NUMERICAL INTEGRATION
 (7-POINT GAUSS-HERMITE FORMULA)
 C/041/A GSH8A NUMERICAL INTEGRATION
 (8-POINT GAUSS-HERMITE FORMULA)
 C/042/A GSH9A NUMERICAL INTEGRATION
 (9-POINT GAUSS-HERMITE FORMULA)
 C/043/A GSH10A NUMERICAL INTEGRATION
 (10-POINT GAUSS-HERMITE FORMULA)
 C/043/B GSH10B NUMERICAL INTEGRATION
 (10-POINT GAUSS-HERMITE FORMULA)
 C/044/A GSH11A NUMERICAL INTEGRATION
 (11-POINT GAUSS-HERMITE FORMULA)
 C/044/B GSH11B NUMERICAL INTEGRATION
 (11-POINT GAUSS-HERMITE FORMULA)
 C/045/A GSH12A NUMERICAL INTEGRATION
 (12-POINT GAUSS-HERMITE FORMULA)
 C/045/B GSH12B NUMERICAL INTEGRATION
 (12-POINT GAUSS-HERMITE FORMULA)
 C/046/A GSH13A NUMERICAL INTEGRATION
 (13-POINT GAUSS-HERMITE FORMULA)
 C/046/B GSH13B NUMERICAL INTEGRATION
 (13-POINT GAUSS-HERMITE FORMULA)
 C/047/A GSH14A NUMERICAL INTEGRATION
 (14-POINT GAUSS-HERMITE FORMULA)
 C/047/B GSH14B NUMERICAL INTEGRATION
 (14-POINT GAUSS-HERMITE FORMULA)
 C/048/A GSH15A NUMERICAL INTEGRATION
 (15-POINT GAUSS-HERMITE FORMULA)
 C/048/B GSH15B NUMERICAL INTEGRATION
 (15-POINT GAUSS-HERMITE FORMULA)
 C/049/B GSH16B NUMERICAL INTEGRATION
 (16-POINT GAUSS-HERMITE FORMULA)
 C/050/B GSH17B NUMERICAL INTEGRATION
 (17-POINT GAUSS-HERMITE FORMULA)
 C/051/B GSH18B NUMERICAL INTEGRATION
 (18-POINT GAUSS-HERMITE FORMULA)

C/052/B GSH19B NUMERICAL INTEGRATION
(19-POINT GAUSS-HERMITE FORMULA)
C/053/B GSH20B NUMERICAL INTEGRATION
(20-POINT GAUSS-HERMITE FORMULA)
C/054/B GSH21B NUMERICAL INTEGRATION
(21-POINT GAUSS-HERMITE FORMULA)
C/055/B GSH22B NUMERICAL INTEGRATION
(22-POINT GAUSS-HERMITE FORMULA)
C/056/B GSH23B NUMERICAL INTEGRATION
(23-POINT GAUSS-HERMITE FORMULA)
C/057/B GSH24B NUMERICAL INTEGRATION
(24-POINT GAUSS-HERMITE FORMULA)
C/058/B GSH25B NUMERICAL INTEGRATION
(25-POINT GAUSS-HERMITE FORMULA)
C/059/B GSH26B NUMERICAL INTEGRATION
(26-POINT GAUSS-HERMITE FORMULA)
C/060/B GSH27B NUMERICAL INTEGRATION
(27-POINT GAUSS-HERMITE FORMULA)
C/061/B GSH28B NUMERICAL INTEGRATION
(28-POINT GAUSS-HERMITE FORMULA)
C/062/B GSH29B NUMERICAL INTEGRATION
(29-POINT GAUSS-HERMITE FORMULA)
C/063/B GSH30B NUMERICAL INTEGRATION
(30-POINT GAUSS-HERMITE FORMULA)
C/064/B GSH31B NUMERICAL INTEGRATION
(31-POINT GAUSS-HERMITE FORMULA)
C/065/A SIMP2A NUMERICAL INTEGRATION
(SIMPSON'S 1/3 RULE, DIGITAL INPUT WITH
NON-EQUAL INTERVALS)
C/065/B SIMP2B NUMERICAL INTEGRATION
(SIMPSON'S 1/3 RULE, DIGITAL INPUT WITH
NON-EQUAL INTERVALS)
C/066/A SIMPFA NUMERICAL INTEGRATION IN HALF INFINITE
INTERVAL (SIMPSON'S 1/3 RULE)
C/066/B SIMPFB NUMERICAL INTEGRATION IN HALF INFINITE
INTERVAL (SIMPSON'S 1/3 RULE)
C/067/A MSIMPA NUMERICAL INTEGRATION
(DOUBLE INTERVAL, SIMPSON'S 1/3 RULE)
C/067/B MSIMPB NUMERICAL INTEGRATION
(DOUBLE INTERVAL, SIMPSON'S 1/3 RULE)
C/068/A MGAUSA NUMERICAL INTEGRATION
(DOUBLE INTERVAL, GAUSS-LEGENDER FORMULA)
C/068/B MGAUSB NUMERICAL INTEGRATION
(DOUBLE INTERVAL, GAUSS-LEGENDER FORMULA)
D. 代数方程式
D/001/A CARDNA ALGEBRAIC EQUATION OF DEGREE 3 (CARDANO'S
METHOD)
D/001/B CARDNB ALGEBRAIC EQUATION OF DEGREE 3 (CARDANO'S
METHOD)

D/002/A FERRAA ALGEBRAIC EQUATION OF DEGREE 4 (FERRARI'S
METHOD)
D/002/B FERRAB ALGEBRAIC EQUATION OF DEGREE 4 (FERRARI'S
METHOD)
D/003/A BAIR1A ALGEBRAIC EQUATION (BAIRSTOW'S METHOD)
D/003/B BAIR1B ALGEBRAIC EQUATION (BAIRSTOW'S METHOD)
D/004/A REGFLA ALGEBRAIC EQUATION (REGULA-FALSI METHOD)
D/004/B REGFLB ALGEBRAIC EQUATION (REGULA-FALSI METHOD)
D/005/A CNWTNA ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
(NEWTON-RAPHSON METHOD)
D/005/B CNWTNB ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
(NEWTON-RAPHSON METHOD)
D/006/A JARATA ALGEBRAIC EQUATION (JARRATT'S MODIFIED
METHOD)
D/006/B JARATB ALGEBRAIC EQUATION (JARRATT'S MODIFIED
METHOD)
D/007/A CJARTA ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
(JARRATT'S METHOD)
D/007/B CJARTB ALGEBRAIC EQUATION WITH COMPLEX COEFFICIENTS
(JARRATT'S METHOD)
D/008/A CTRNCA TRANSCENDENTAL EQUATION WITH COMPLEX
COEFFICIENTS
D/008/B CTRNCB TRANSCENDENTAL EQUATION WITH COMPLEX
COEFFICIENTS
D/009/A NONLEA THE SOLUTION OF SYSTEMS OF NON-LINEAR
EQUATIONS
D/009/B NONLEB THE SOLUTION OF SYSTEMS OF NON-LINEAR
EQUATIONS

D. 連立一次方程式

E/001/A GAUSEA LINEAR EQUATIONS (GAUSS-SEIDEL METHOD)
E/001/B GAUSEB LINEAR EQUATIONS (GAUSS-SEIDEL METHOD)
E/002/A GAUELA LINEAR EQUATIONS (GAUSS ELIMINATION METHOD)
E/002/B GAUELB LINEAR EQUATIONS (GAUSS ELIMINATION METHOD)
E/003/A SWEEP A LINEAR EQUATIONS (SWEEP OUT METHOD)
E/003/B SWEEP B LINEAR EQUATIONS (SWEEP OUT METHOD)
E/004/A CSWEPA LINEAR EQUATIONS WITH COMPLEX COEFFICIENTS
(SWEEP OUT METHOD)
E/004/B CSWEPB LINEAR EQUATIONS WITH COMPLEX COEFFICIENTS
(SWEEP OUT METHOD)
E/005/A TRIDGA TRIDIAGONAL EQUATIONS (GAUSS'S ELIMINATION
METHOD)
E/006/A SIMEQA LINEAR EQUATIONS AND DETERMINANTS (SWEEP OUT
METHOD)
E/006/B SIMEQB LINEAR EQUATIONS AND DETERMINANTS (SWEEP OUT
METHOD)
E/007/A LA2QRA LINEAR EQUATIONS, LEAST SQUARES
E/007/B LA2QRB LINEAR EQUATIONS, LEAST SQUARES

F. 常微分方程式

F/001/A RKGA ORDINARY DIFFERENTIAL EQUATION (RUNGE-KUTTA-GILL METHOD)
 F/001/B RKGB ORDINARY DIFFERENTIAL EQUATION (RUNGE-KUTTA-GILL METHOD)
 F/002/A SRKGA SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD)
 F/002/B SRKGB SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD)
 F/003/A SRKG2A SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD, WITH CHANGING INTERVAL AUTOMATICALLY)
 F/003/B SRKG2B SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS (RUNGE-KUTTA-GILL METHOD, WITH CHANGING INTERVAL AUTOMATICALLY)
 F/004/A HAMPCA SYSTEM OF SIMULTANEOUS ORDINARY DIFFERENTIAL EQUATIONS (HAMMING'S METHOD)
 F/004/B HAMPCB SYSTEM OF SIMULTANEOUS ORDINARY DIFFERENTIAL EQUATIONS (HAMMING'S METHOD)

G. 行列

G/001/A MADDA MATRIX ADDITION
 G/001/B MADDB MATRIX ADDITION
 G/002/A MSUBA MATRIX SUBTRACTION
 G/002/B MSUBB MATRIX SUBTRACTION
 G/003/A MMUL1A MATRIX MULTIPLICATION 1
 G/003/B MMUL1B MATRIX MULTIPLICATION 1
 G/004/A MMUL2A MATRIX MULTIPLICATION 2
 G/004/B MMUL2B MATRIX MULTIPLICATION 2
 G/005/A MTRNSA MATRIX TRANSPOSITION
 G/005/B MTRNSB MATRIX TRANSPOSITION
 G/006/A MUNITA UNIT MATRIX
 G/006/B MUNITB UNIT MATRIX
 G/007/A MPRTA MATRIX PRINT
 G/007/B MPRTB MATRIX PRINT
 G/008/A MDETA DETERMINANT
 G/008/B MDETB DETERMINANT
 G/009/A MINVA MATRIX INVERSION (SWEEP OUT METHOD)
 G/009/B MINVB MATRIX INVERSION (SWEEP OUT METHOD)
 G/010/A JACOBA EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (THRESHOLD-JACOBI METHOD)
 G/010/B JACOB B EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (THRESHOLD-JACOBI METHOD)
 G/013/A HERMTA EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX
 G/013/B HERMTB EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX
 G/014/A DABAA EIGENVALUES OF REAL MATRIX (DANILEVSKII'S METHOD)

G/014/B DABAB EIGENVALUES OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/015/A DANEWA EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/015/B DANEWB EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (DANILEVSKII'S METHOD)
 G/016/A EVECA EIGENVECTORS OF REAL MATRIX (SWEEP OUT METHOD)
 G/016/B EVECB EIGENVECTORS OF REAL MATRIX (SWEEP OUT METHOD)
 G/017/A HOUSA EIGENVALUES OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/017/B HOUSB EIGENVALUES OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/018/A HESORA EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (QR METHOD)
 G/018/B HESORB EIGENVALUES AND EIGENVECTORS OF REAL MATRIX (QR METHOD)
 G/019/A HOUS2A EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/019/B HOUS2B EIGENVALUES AND EIGENVECTORS OF REAL SYMMETRIC MATRIX (HOUSEHOLDER METHOD)
 G/020/A QREGNA EIGENVALUES OF REAL MATRIX (QR METHOD)
 G/020/B QREGB EIGENVALUES OF REAL MATRIX (QR METHOD)
 G/021/A GAVECA EIGENVECTORS OF REAL MATRIX (INVERSE ITERATION METHOD)
 G/021/B GAVECB EIGENVECTORS OF REAL MATRIX (INVERSE ITERATION METHOD)
 G/022/A MINV2A MATRIX INVERSION WITH SCALING
 G/022/B MINV2B MATRIX INVERSION WITH SCALING
 G/023/A GAVE2A RIGHT HAND SIDE AND LEFT HAND SIDE EIGENVECTORS OF REAL MATRIX (INVERSE ITERATION METHOD)
 G/023/B GAVE2B RIGHT HAND SIDE AND LEFT HAND SIDE EIGENVECTORS OF REAL MATRIX (INVERSE ITERATION METHOD)
 G/024/A CHSORA EIGENVALUES AND EIGENVECTORS OF COMPLEX MATRIX (QR METHOD)
 G/024/B CHSORB EIGENVALUES AND EIGENVECTORS OF COMPLEX MATRIX (QR METHOD)
 G/025/A THJACA EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (THRESHOLD-JACOBI METHOD)
 G/025/B THJACB EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (THRESHOLD-JACOBI METHOD)
 G/026/A HMTORA EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)
 G/026/B HMTORB EIGENVALUES AND EIGENVECTORS OF HERMITIAN MATRIX (QR METHOD)
 G/027/A GEIGNA THE GENERALIZED SYMMETRIC EIGENVALUE PROBLEMS, AX=LAMDA*AX (QR METHOD, INVERSE ITERATION)

G/027/B GEIGNB THE GENERALIZED SYMMETRIC EIGENVALUE PROBLEMS.
AX=LAMDA*BX (QR METHOD, INVERSE ITERATION)

H. フーリエ級数

H/001/B COFOB COSINE ANALYSIS OF FOURIER SERIES
H/002/B SIFOB SINE ANALYSIS OF FOURIER SERIES
H/003/B COASSB COSINE SYNTHESIS OF FOURIER SERIES
H/004/B SIASSB SINE SYNTHESIS OF FOURIER SERIES
H/005/A FFTA COMPLEX FOURIER TRANSFORM AND INVERSE TRANSFORM
H/005/B FFTB COMPLEX FOURIER TRANSFORM AND INVERSE TRANSFORM

I. 関数近似

I/001/B LSTSWB POLYNOMIAL APPROXIMATION BY LEAST SQUARE
I/002/B BSTAPB BEST APPROXIMATION
I/003/A LAGA LAGRANGE'S INTERPOLATION
I/003/B LAGB LAGRANGE'S INTERPOLATION
I/005/A CHEBA TCHEBYSHEV APPROXIMATION (COMPUTE THE
TCHEBYSHEV COEFFICIENTS)
I/005/B CHEBB TCHEBYSHEV APPROXIMATION (COMPUTE THE
TCHEBYSHEV COEFFICIENTS)
I/006/A TINTA TCHEBYSHEV APPROXIMATION (COMPUTE THE
FUNCTION VALUE BY USING TCHEBYSHEV
COEFFICIENTS)
I/006/B TINTB TCHEBYSHEV APPROXIMATION (COMPUTE THE
FUNCTION VALUE BY USING TCHEBYSHEV
COEFFICIENTS)
I/007/A SPLINA SPLINE INTERPOLATION
I/007/B SPLINB SPLINE INTERPOLATION
I/008/A CHBAPA RATIONAL APPROXIMATION BY CHEBYSHEV'S
POLYNOMIAL
I/008/B CHBAPB RATIONAL APPROXIMATION BY CHEBYSHEV'S
POLYNOMIAL
I/009/A CHBCFA BEST APPROXIMATION BY CHEBYSHEV'S POLYNOMIAL,
DISCRETE DATA
I/009/B CHBCFB BEST APPROXIMATION BY CHEBYSHEV'S POLYNOMIAL,
DISCRETE DATA

I/010/A CONFRA RATIONAL APPROXIMATION BY CONTINUED FRACTION,
DISCRETE DATA

I/010/B CONFRB RATIONAL APPROXIMATION BY CONTINUED FRACTION,
DISCRETE DATA

J. 偏微分方程式

J/001/A ELPDEA PARTIAL DIFFERENTIAL EQUATION OF ELLIPTIC
TYPE
J/002/A PAPDEA PARTIAL DIFFERENTIAL EQUATION OF PARABOLIC
TYPE
J/002/B PAPDEB PARTIAL DIFFERENTIAL EQUATION OF PARABOLIC
TYPE
J/003/A HYPDEA PARTIAL DIFFERENTIAL EQUATION OF HYPERBOLIC
TYPE
J/003/B HYPDEB PARTIAL DIFFERENTIAL EQUATION OF HYPERBOLIC
TYPE

K. 積分方程式

K/001/A INEV2A VOLTERRA'S INTEGRAL EQUATION OF SECOND KIND
K/001/B INEV2B VOLTERRA'S INTEGRAL EQUATION OF SECOND KIND

Z. その他

Z/001/A POADDA ADDITION OF POLYNOMIALS
Z/001/B POADDB ADDITION OF POLYNOMIALS
Z/002/A POSUBA SUBTRACTION OF POLYNOMIALS
Z/002/B POSUBB SUBTRACTION OF POLYNOMIALS
Z/003/A POMULA MULTIPLICATION OF POLYNOMIALS
Z/003/B POMULB MULTIPLICATION OF POLYNOMIALS
Z/004/A PODIVA DIVISION OF POLYNOMIALS
Z/004/B PODIVB DIVISION OF POLYNOMIALS
Z/006/A NORRNA NORMAL RANDOM NUMBERS
Z/007/A POISNA POISSON RANDOM NUMBERS
Z/009/A COMBA BINOMIAL COEFFICIENTS
Z/009/B COMBB BINOMIAL COEFFICIENTS
Z/010/A DAVIDA MINIMIZATION OF FUNCTION DERIVATIVE
Z/010/B DAVIDB MINIMIZATION OF FUNCTION DERIVATIVE