REVISION NOTICE

This description replaces previous descriptions of "Matrix Inversion Control " program D1-139.1. Program references have been changed to current designations.

FUNCTION

"Matrix Inversion Control" enables the interpretive routine to input, invert, and print an n x n matrix, using program D1-139.0.

INPUT

The rank of the matrix in decimal, nn', and the N^2 elements of the matrix are stored in consecutive memory locations in standard double precision floating point format.

OUTPUT

The n^2 elements of the inverted matrix are stored in consecutive memory locations in standard double precision floating point format.

STORAGE

54 sectors are required in memory for instructions and constants. $3(n^2 + n)$ locations immediately following this routine are used for data storage.

NOTES

A 30 x 30 matrix can be handled if the following programs are stored as shown

Program Input 4, program J1-10.4	Lo 0000
Floating Point Interpretive System, program H1-24.3	Lo 0300
Matrix Inversion 4, program D1-139.0	Lo 1722
Matrix Inversion Control	Lo 1936

Royal McBee Corporation
ELECTRONIC COMPUTER DEPARTMENT

DOUBLE PRECISION FLOATING POINT MATRIX INVERSION CONTROL

FUNCTION

To input, invert, and print an n x n matrix, using DPFP interpretive routine ( ) and DPFP inversion routine ( ).

INPUT

nn', the rank of the matrix in decimal, and the n^2 elements of the matrix in standard DPFP format.

OUTPUT

The n^2 elements of the inverted matrix in standard DPFP.

STORAGE

54 locations for instructions and constants. $3(n^2 + n)$ locations immediately following this routine are used for data storage.

NOTES

A 30 x 30 matrix can be handled if the following programs are stored as shown:

10.4 P.I.R.	Lo = 0000
DPFP	Lo = 0300
DPFP MATRIX INVERSION	Lo = 1722
MATRIX INVERSION CONTROL	Lo = 1936

LGP-30 CODING SHEET

PREPARED FOR

JOB NO: 5153 | PROGRAM NO: | PROGRAM PREPARED BY: [illegible] | PROGRAM CHECKED BY: | PAGE: 1 OF 2 | DATE: 1-26-60 | TRACK:

PROBLEM: L.I.F. Inversion Control

PROGRAM INPUT CODES	STOP	LOCATION	INSTRUCTION OPERATION	INSTRUCTION ADDRESS	STOP	CONTENTS OF ADDRESS	NOTES
1136	'						
1936	'	☒					
		2000	XP	0050	'		
		0001	C	0017	'		
		0002	XI	0052	'		
		0003	N	0023	'	☒ 1@29	
		0004	H	0017	'		
		0005	E	0044	'	350	
		0006	M	0051	'	-6@4	
		0007	A	0017	'	☒	
		0008	C	0017	'	7L	
		0009	XR	0300	'		4[illegible]
		0010	XU	0300	'		+50
		0011	I	0054	'	☒	
		0012	XE	0000	'		
		0013	XR	1720	'		4600
		0014	XU	1720	'		4000
		0015	XZ	0300	'	☒	4500
		0016	Z	0054	'		
		0017	[illegible]		'	7	
		0018	XP	1624	'		
		0019	E	0016	'	☒	
		0020	Y	0029	'		
		0021	B	0017	'		
		0022	S	0023	'	1@20	
		0023	XZ	0001	'	☒ 1@27	
		0024	H	0049	'	7L	
		0025	H	0052	'	7L	
		0026	C	0053	'	7L	
		0027	XR	0300	'	☒	4500
		0028	XU	0300	'		+50
		0029	P	C 3	'		
		0030	XE	0003	'		
		0031	XP	1617	'	☒	

☒ CARRIAGE RETURN

FORM LP-10

Royal McBee Corporation
DATA PROCESSING DIV.
PORT CHESTER NEW YORK

LGP-30 CODING SHEET

PREPARED FOR

JOB NO. 913 | PROGRAM NO. | PROGRAM PREPARED BY L.K. | PROGRAM CHECKED BY

PAGE 2 OF 2

DATE 1-26-60

PROBLEM D.Y.F.T. Conversion Control

TRACK

PROGRAM INPUT CODES	STOP	LOCATION	INSTRUCTION OPERATION	INSTRUCTION ADDRESS	STOP	CONTENTS OF ADDRESS	NOTES
	1				1		
	1	☒			1		
		02	B	0029	1		
		03	A	0037	1	30029	
		04	Y	0029	1		
		05	B	0052	1	☒ ctr	
		06	S	0023	1	10029	
		07	XE	0003	1		
		08	T	0041	1		
		09	C	0052	1	☒ ctr	
		10	U	0027	1		
		11	XP	1627	1		
		12	B	0053	1	ctr	
		13	S	0023	1	☒ 10029	
		14	XE	0348	1	ctr	
		15	T	0049	1		
		16	C	0053	1	ctr 2	
		17	B	0049	1	☒ ctr	
		18	U	0039	1		
		19	(	)	1	ctr	
		20	U	0013	1		
10000003	1	21	X	0000	1	☒	
		22			1	ctr	
		23			1	ctr	
		24			1		
		25			1	☒	
		26			1		
		27			1		
		28			1		
		29			1	☒	
		30			1		
		31			1		
		32			1		
		33			1	☒	

FORM LP-32

☒ CARRIAGE RETURN

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