************************************** ************************************ ************************************ DATE: 05-03-2025 14:16:47 USER: COBOL JOB: MATMUL PAGE: 0000 3 3 COBOL FILE NAME/TYPE= /COBOL/MATH/MATMUL.COB MATMUL COBOL MATMUL MATMUL COBOL CREATION DATE/TIME= 05-03-2025 14:16:47 COBOL MATMUL MATMUL COBOL FILE= 001 PAGES= 0002 LINES= 000104 MATMUL COBOL SYSTEM= LINUX(6.12.13-AMD64) MATMUL COBOL MATMUL COBOL SYSUSER= ACID MATMUL COBOL SYSID= ACID MATMUL COBOL FORM= SMALL MATMUL COBOL MATMUL COBOL CHAR= FONTMONO MATMUL COBOL MATMUL COBOL PRT1403 VERSION= 1.5.PRE-RELEASE MATMUL COBOL 19 CCCCCCC 0000000 BBBBBBBB 0000000 LL CCCCCCCC 000000000 BBBBBBBB 000000000 LL 23 CC 00 00 BB BB 00 00 LL CC 00 00 BB BB 00 00 LL 25 00 LL CC 00 BBBBBBBB 00 00 26 00 BBBBBBBB CC 00 27 00 00 LL CC 00 00 BB BB 00 00 LL 28 CC 00 00 BB BB 00 00 LL CC 29 30 40 CCCCCCC 0000000 BBBBBBBB 0000000 LLLLLLLL 31 32 М М AAA TTTTTTT М M UU UU LL 34 MM MM AAAAA MM MM UU UU LL TTTTTTTTMMM MMM AA MMM MMM UU UU LL AA TT MMMM MMMM AA AA MMMM MMMM UU UU LL 37 TT 49 MM MMM AA AA TT MM MMM MM UU UU LL 38 MM AAAAAAAA MM MM UU UU LL MM TT MM MM AAAAAAAA TT MM MM UU UU LL 40 MM AA MM UU MM AA TT MM UU LL MM MM AA AA MM MM UUUUUUUUU LLLLLLLL TT MM MM AA AA TT MM UUUUUUU 00000 00000 1 0000000 0000000 11 47 00 00 00 00 111 00 00 00 00 11 00 11 00 00 00 50 00 00 00 00 11 00 00 00 11 00 00 00 00 00 11 0000000 111111 0000000 00000 00000 111111 **********************************

,

DATE: 05-03-2025 14:16:47 USER: COBOL JOB: MATMUL PAGE: 0001

(-			
	4	000001	TRENTIETCATION DIVICION	1
		000001		
	2	000002	PROGRAM-ID. MatrixCalculation.	2
	3	000003		4
		000004		
		000005	DATA DIVISION.	5 6 7
			DATA DIVISION.	7
		000006		8
	7	000007	WORKING-STORAGE SECTION.	9
	8	000008	1	0
		000009	01 M-SIZE PIC 9(4) COMP VALUE 400.	1
				3
		000010	04	4
		000011	01 RESULT1 PIC S9(14) COMP VALUE 0.	4 5
	12	000012	01 RESULT2 PIC S9(14) COMP VALUE 0.	6
	13	000013		7
		000014	01 TIME1 COMP-2 VALUE 0.	8
		000015	01 TIME2 COMP-2 VALUE 0.	9
				20
		000016		.1
		000017	01 M1.	3
	18	000018	05 M1-ROW OCCURS 400 TIMES.	24
		000019	10 M1-ELEMENTS OCCURS 400 TIMES PIC S9(10) COMP.	:5
		000020	01 M2.	6
			OF MO DOW OCCUPS AND TIMES	.7
		000021	05 M2-ROW OCCURS 400 TIMES.	21 22 23 24 25 26 27 28 29 30
		000022	10 M2-ELEMENTS OCCURS 400 TIMES PIC S9(10) COMP.	.9
	23	000023	01 M3.	10
		000024	05 M3-ROW OCCURS 400 TIMES.	32
		000025		3
		000026	10 110 ELEMENTS GEOMS 400 TIMES 110 37(10) COM:	14
			04 T DTC CO(40) COMP	33 34 35 36
		000027	01 I PIC S9(10) COMP.	6
		000028	01 J PIC S9(10) COMP.	37
	29	000029	01 K PIC S9(10) COMP.	8
		000030		38 39 10
		000031	01 START-TIME PIC S9(10) COMP.	11
			01 START THE TIC SY(10) COMP.	2
		000032	01 END-TIME PIC S9(10) COMP.	12 13 14
		000033		4
	34	000034	01 TEMP PIC S9(10) COMP.	15 16
	35	000035		6
		000036	01 RESULT1_TXT PIC 9(14).	17
		000037	01 RESULT2_TXT PIC 9(14).	18 19
			01 RESULIZ_IAI F1C 9(14).	0
		000038	01 TIME1_ $T\bar{X}T$ PIC 9(3).9(6).	50 51
		000039	of $IIME2_IXI$ Pic $9(3).9(6)$.	52
	40	000040		53 54 55 56
		000041	PROCEDURE DIVISION.	4
		000042		5
		000040		6 57
			*	8
		000044		58 59 50
	45	000045	ACCEPT START-TIME FROM TIME.	0
	46	000046	ϵ	31
		000047	MOVE 0 TO RESULT1.	2
		000047	HOVE O TO RESSELL.	33 34 35 36 37
			DEDECOM VARVING I FROM 1 DV 1 UNITI 100 4 I	4
		000049	PERFORM VARYING I FROM 1 BY 1 UNTIL 100 < I	5
		000050	PERFORM VARYING J FROM 1 BY 1 UNTIL 1000000 < J	7
	51	000051	ADD J TO RESULT1	88
		000052	END-PERFORM	39
		000053	END-PERFORM.	0
		000053	THE TEN ONL.	1
			ACCEPT END TIME EDOM TIME	2
		000055	ACCEPT END-TIME FROM TIME.	3
		000056	COMPUTE TIME1 = (END-TIME - START-TIME) / 100.	+ '5
	57	000057	7	70 71 72 73 74 75 76
		000050		7
		000059	77	78
		000039	7	79
	οU	000000	AUGLET START TITTL TRUTT TITTE.	30

_		
1 000061		
2 000062	PERFORM VARYING I FROM 1 BY 1 UNTIL M-SIZE < I	
3 000063	PERFORM VARYING J FROM 1 BY 1 UNTIL M-SIZE < J	
4 000064	ADD I TO J GIVING M1-ELEMENTS(I, J)	
5 000065	ADD I TO J GIVING M2-ELEMENTS(I, J)	
000066	END-PERFORM	
000067	END-PERFORM.	
000068		
000069	PERFORM VARYING I FROM 1 BY 1 UNTIL M-SIZE < I	
000070	PERFORM VARYING J FROM 1 BY 1 UNTIL M-SIZE < J	
1 000071	MOVE 0 TO M3-ELEMENTS(I, J)	
2 000072	PERFORM VARYING K FROM 1 BY 1 UNTIL M-SIZE < K	
3 000073	MULTIPLY M1-ELEMENTS(I, K) BY M2-ELEMENTS(K, J)	
4 000074	GIVING TEMP	
5 000075	ADD_TEMP_TO_M3-ELEMENTS(I, J)	
6 000076	END-PERFORM	
7 000077	END-PERFORM	
8 000078	END-PERFORM.	
9 000079		
000080	MOVE 0 TO RESULT2.	
000081		
2 000082	PERFORM VARYING I FROM 1 BY 1 UNTIL M-SIZE < I	
3 000083	PERFORM VARYING J FROM 1 BY 1 UNTIL M-SIZE < J	
4 000084	ADD M3-ELEMENTS(I, J) TO RESULT2	
5 000085	END-PERFORM	
000086	END-PERFORM.	
7 000087	ACCEPT FUR TIME FROM TIME	
8 000088	ACCEPT END-TIME FROM TIME.	
9 000089	COMPUTE TIME2 = (END-TIME - START-TIME) / 100.	;
000090		
000091	*	
2 000092	MOVE DECLUTA TO DECLUTA TVT	
000093	MOVE RESULT1 TO RESULT1_TXT	
000094 000095	MOVE RESULT2 TO RESULT2_TXT MOVE TIME1 TO TIME1 TXT	,
	_	
6 000096 7 000097	MOVE TIME2 TO TIME2_TXT	
00000	DISPLAY 'COBOL : Result= ' RESULT1_TXT	
9 000098	', Time= ' TIME1_TXT ' sec'	
000099	', Result= ' RESULT2 TXT	
000100	', Result= ' RESULT2_TXT ', Time= ' TIME2_TXT ' sec'.	
2 000101	, IIIIC- IIIIC2_IXI 360 .	
3 000102	STOP RUN.	
4 000103		
5		
6		
17		
8		
9		
50		
1		
52		
53		ľ
54		
55		
56		
57		