

Edit



RESULT:

## FACTORIAL OF A GIVEN NUMBER USING 8085 MICROPROCESSOR

EXP NO: 9

AIM: To find the factorial of a given number using 8085 microprocessor.

PROGRAM:

ADDRESS	MNEMONICS	COMMENTS
8100	LXI H,8500H	Load data from memory
8103	MOV B,H	Load data to B register
8104	MVI D,01H	Set D register with 1
8106	CALL MULTIPLY	Subroutine call for multiplication
8109	DCR B	Decrement B
810A	JNZ FACTORIAL	Call factorial till B becomes 0
810D	INX H	Increment memory
810E	MOV M,D	Store result in memory
810F	HLT	Halt
8200	MOV E,B	Transfer contents of B to C
8201	MVI A,00H	Clear accumulator to store result
8203	MULTIPLYLOOP: ADD D	Add contents of D to A
8204	DCR E	Decrement E
8205	JNZ MULTIPLYLOOP	Repeated addition
8208	MOV D,A	Transfer contents of A to D
8209	RET	Return from subroutine

INPUT:

8500 05H

OUTPUT:

8501 78H

RESULT:

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LARGEST NUMBER IN AN ARRAY



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