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

ALGORITHM:
1) Load the data into register B
2) To start multiplication set D to 01H
3) Jump to step 7
4) Decrements B to multiply previous number
5) Jump to step 3 till value of B>0
6) Take memory pointer to next location and store result
7) Load E with contents of B and clear accumulator
8) Repeatedly add contents of D to accumulator E times
9) Store accumulator content to D

10) Go to

LDA 2001	
MOV B,A	
MVI C,01H	
MVI E,01H	
LOOP: MOV D,C	
MVI A,00H	
LP: ADD E	
DCR D	
JNZ LP	
MOV E,A	
INR C	
DCR B	
JNZ LOOP	
MOV A,E	

step 4

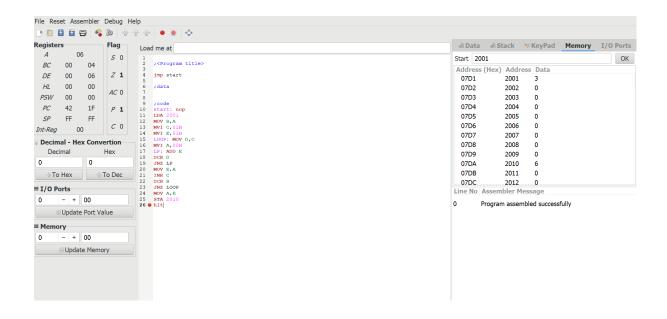
PROGRAM:

HLT

INPUT:

⊗ Data ⊗ St	ack 👺 l	KeyPad	Memory	I/O Ports
Start 2001				OK
Address (Hex)	Address	Data		
07D1	2001	3		
07D2	2002	0		
07D3	2003	0		
07D4	2004	0		
07D5	2005	0		
07D6	2006	0		
07D7	2007	0		
07D8	2008	0		
07D9	2009	0		
07DA	2010	6		

OUTPUT:



RESULT: Thus the program was executed successfully using 8085 processor simulator.