

Lab 07

SUB: CSA

**NAME : JARIWALA SAHIL
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ROLL NO: CE049

1. Addition using CALL instruction.

CALL addition

STA 8000h

JMP stop

addition: MVI b, 2

MVI a, 3

ADD b

RET

stop: HLT

2.Find Factorial using CALL instruction.

LXI H, 2000H

MOV B, M

MVI D, 01H

FACTORIAL: CALL MULTIPLY

DCR B

JNZ FACTORIAL

INX H

MOV M, D

HLT

MULTIPLY: MOV E, B

MVI A, 00H

MULTIPLYLOOP: ADD D

DCR E

JNZ MULTIPLYLOOP

MOV D, A
RET

3. Make up counter.

MVI B,00H

MVI D,0H

MVI C,8AH

BCD:

MVI B,00H

INR D

COUNT:

INR B

OUT 01H

MOV A,B

CPI FH

JZ BCD

CALL DELAY

JMP COUNT

DELAY:

MOV A,C

LOOP:

DCR A

JNZ LOOP

RE

4.Make bcd up counter.

MVI B,00H

MVI D,0H

MVI C,8AH

BCD:

MVI B,00H

INR D

COUNT:

INR B

OUT 01H

MOV A,B

CPI 9H

JZ BCD

CALL DELAY

JMP COUNT

DELAY:

MOV A,C

LOOP:

DCR A

JNZ LOOP

RE