Practical-7

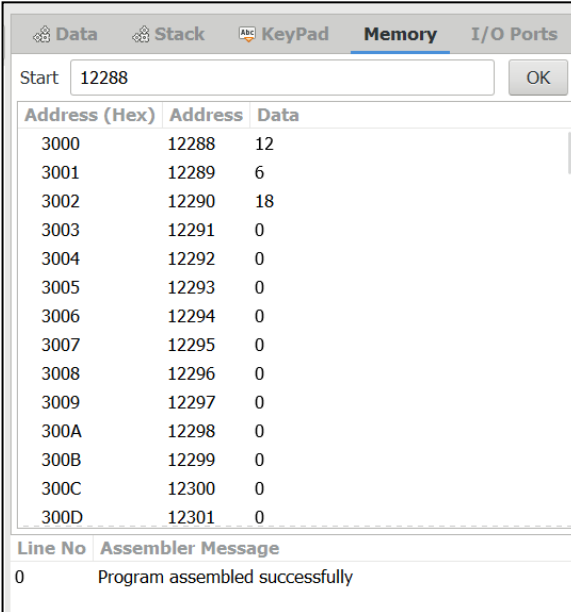## Aim: Write a program using 8085 & verify for:

1. Addition of Two 8-Bit Numbers.

```
1
2   ;<Program title>
3
4   jmp start
5
6   ;data
7
8
9   ;code
10  start: nop
11
12  lxi   h, 3000H
13  mov   b, m
14  inx   h
15  mov   a, m
16  add   b
17  sta   3002H
18
19
20  hlt
```

Data	Stack	KeyPad	Memory	I/O Ports

Start 12288   OK

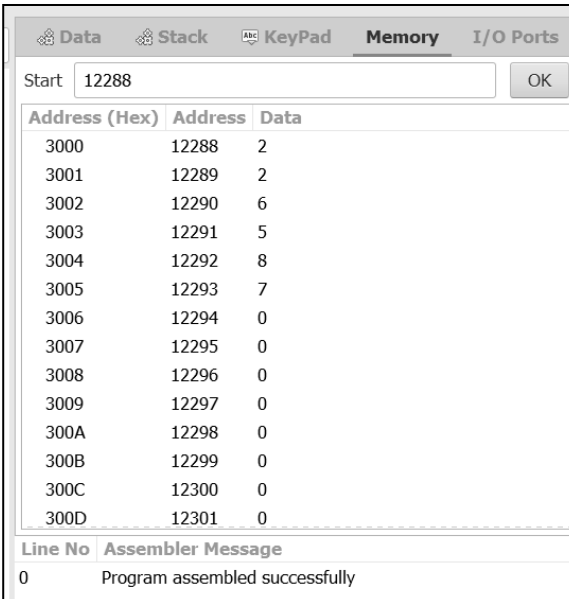| Address (Hex)	Address	Data
3000	12288	12
3001	12289	6
3002	12290	18
3003	12291	0
3004	12292	0
3005	12293	0
3006	12294	0
3007	12295	0
3008	12296	0
3009	12297	0
300A	12298	0
300B	12299	0
300C	12300	0
300D	12301	0

Line No	Assembler Message
0	Program assembled successfully

2. Addition of Two 16-Bit Numbers (With Carry):

```
1
2   ;<Program title>
3
4   jmp start
5
6   ;data
7
8
9   ;code
10  start: nop
11
12  lhld 3000H
13  xchg
14  lhld 3002H
15  mvi   c, 00H
16  dad   d
17  jnc   loop
18  inr   c
19  loop:   shld   3004H
20  mov a, c
21  sta 3006H
22
23  hlt
```

Data	Stack	KeyPad	Memory	I/O Ports

Start 12288   OK

Address (Hex)	Address	Data
3000	12288	2
3001	12289	2
3002	12290	6
3003	12291	5
3004	12292	8
3005	12293	7
3006	12294	0
3007	12295	0
3008	12296	0
3009	12297	0
300A	12298	0
300B	12299	0
300C	12300	0
300D	12301	0

Line No	Assembler Message
0	Program assembled successfully

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