

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 inc 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 inc 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