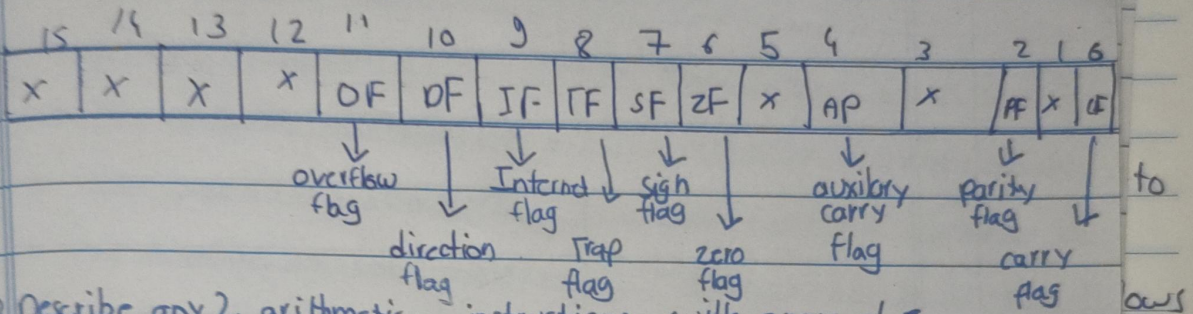## Experiment - 6

I. write & Execute an assembly language program to add/ subtract

(Code in Practical)

II. Practical Related questions

a] Draw flag register of 8086

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
x	x	x	x	OF	DF	IF	TF	SF	ZF	x	AP	x	AF	x	CF

overflow flag — direction flag — Internal flag — Trap flag — sign flag — zero flag — auxibry carry flag — parity flag — carry flag — to — lows — carry flag

Q2 Describe any 2 arithmatic instructions with example

① ADD: This instruction is used to add operands & store the result in the destination operand. Eg ADD Ax, Bxre

② SUB: This instruction is used to subtract the source operand from the destination operand & store the result in destination operand eg :- SUB Cx, Dx

Q3. The invalid instruction is :

MOV DS, 500H. In the 8086 the MOV instruction with a segment register as the destination operand is invalid

Q4 Difference between SUB & SBB instruction

SUB	SBB
- used to subtract the byte from byte/word from word	- used to perform subtraction with borrow
- Syntax :- sub, dest, source	- sbb, dest, source

III Conclusion:- In this expt we discussed the flag registers of 8086