

# Computer Organization & Assembly Language (LAB)

## Lab Task-1

**Total points = 10**

The following are random Assembly Language statements. Understand these statements and fill out boxes related to Registers values. You just need to solve these questions on page with same template or take print out and solve on that page. **Submit only picture or PDF of solved lab task.**

**Q. 1: Fill the following table according to Assembly Language instructions execution, Make sure fill all highlighted boxes with proper value according to instruction execution.**

Line No.	Assembly Instruction	AX	BX	DX
1	MOV BX, 15	0	15	0
2	SUB AX, 1	-1	15	0
3	MOV DX, 4	-1	15	4
4	MUL BX,1	-1	15	4
5	MOV AX, 23	23	15	4
6	DEC BX	23	14	4

Line No.	Assembly Instruction	CX	AH	DX	AX
1	MOV AH, 4	0	4	0	0
2	SUB CX, 16	-16	4	0	0
3	MOV DX, 27	-16	4	27	0
4	MOV AH,DX	-16	27	27	0
5	MOV AX, 23	-16	27	27	23
6	DEC BX	-16	27	27	23

Line No.	Assembly Instruction	BH	DX	AX
1	MOV AX, 'a'	0	0	97
2	ADD AX,16	0	0	113
3	MOV DX, 10011	0	10011	113
4	XOR DX, 11111	0	01100	113
5	MOV BX, 10101	0	01100	113
6	AND DX,BX	0	00100	113

**Q.2: Identify the errors in following Assembly instructions and write the correct one in box. If the statement is correct, then just write “it is correct”.**

<b>Statement</b>	<b>Correct or Incorrect</b>	<b>Correct statement</b>
ADD 10,20	Incorrect	Add AX,10 DD AX,20
MOV AX + 5	Incorrect	MOV AX, 5
MOV CL, 150	Correct	It is Correct
MOV BH, 257	Incorrect	MOV BH, 1 or Mov BX , 257