

Assignment No: 01

Roll: 97

Batch: E-25

Task-1: mov Register, Displacement [BX]

* Roll: 97

* Sum of Roll: $9 + 7 = 16$

* $16 \% 5 = 1$

∴ Then Register AX

∴ Displacement 12 97 H

⇒ mov AX, 12 97 H [BX]

1	0	0	0	1	0	1	1	1	0	0	0	1	1	1
OPCODE						D	W	M	O	D	R	E	G	R/M

Byte 3										Byte 4				
0	1	0	0	0	1	0	0	0	0	1	0	1	1	1
DIRECT ADDRESS LOW BYTE										DIRECT ADDRESS HIGH				

Task 2: mov Displacement [Register 1], Register 2

Register 1:

* Roll: 47

* Sum of Roll: $4 + 7 = 11$

* $\$1 \ll 5 = 1$

Then Register SI

Register 2:

* Roll: 47

* Sum of Roll: $4 + 7 = 11$

* $\$1 \ll 5 = 1$

Then Register: AX

Displacement: 1267H

⌈ mov-1267H[DI], AX ⌋

1	0	0	0	1	0	0	1	1	0	0	1	1	1	0	1
mov						D.W		MOD		REG		R/E			

0	1	0	0	0	1	0	0	0	0	1	0	1	1	1	0
Byte-3								Byte-6							

LOW

HIGH

Task 3: mov register. [Disassemble]

* Roll: 47

* Sum of my Roll: $4+7=11$

$$\therefore 11205 = 1$$

Then register AX

* Displacement 1297 H

mov AX, [1247H]

1	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0
MOV						D	W	MOD	REG			R/M			

1	0	0	0	0	1	0	0	0	0	1	0	1	1	1	0
Byte-3								Byte-4							
Low								High							