

Lab # 2

Task # 1:

Run the following codes on debugger and write down the status of flags:

```
i)
Mov ax,FF12
Mov bx,0012
Add ax,bx
ii)
Mov al,0001
Dec al
iii)
Mov al,ff
Inc al
iv)
Mov ax,40
Mov bx,50
Sub ax,bx
```

Task # 2:

Write an assembly code in debugger using assemble (a) command which can copy the content of 8 byte array (memory) from 0100 – 0107 offset of segment 4000 to the memory located on offset 0200 – 0207 of same segment(4000).

[Use E (enter) command for initializing the source memory (0100-0107) with some data.]

Task # 3:

Write an assembly code in debugger using assemble (a) command which can copy the content of 8 byte array (memory) from 0100 – 0107 offset of segment 4000 **in reverse order** to the memory located on offset 0200 – 0207 of same segment(4000).

[Use E (enter) command for initializing the source memory (0100-0107) with some data.]

Task # 4:

Write an assembly code in debugger using assemble (a) command which can **SWAP** the content of 8 byte arrays (memory) from 0100 – 0107 offset of segment 4000 with the memory located on offset 0200 – 0207 of same segment (4000).

[Use E (enter) command for initializing the both arrays (memory) with some data.]

Task # 5:

Write an assembly code in debugger using assemble (a) command which can **Reverse SWAP** the content of 8 byte arrays (memory) from 0100 – 0107 offset of segment 4000 with the memory located on offset 0200 – 0207 of same segment (4000).

[Use E (enter) command for initializing the both arrays (memory) with some data.]

Note: verify your code by execution using trace (t) command. Also check the content of memory using dump (d) command.