

Assignment No 1

Testing debugger and NASM

Step 1

 _test.asm 22/08/2025 10:38 am ASM File 0 KB

In the first step we have created the file through any text editor with the extension of .asm and save it .

Step 2

```
Z:\>mount x "c:\users\Sajid islam\Downloads\assembly_nasm-main"  
Drive X is mounted as local directory c:\users\Sajid islam\Downloads\assembly_na  
sm-main\  
Z:\>S_
```

In the second step i have mounted the storage with Dosbox using the command **mount**

We have also assign the name to address of directory act as variable (x)-

Step 3

```
Z:\>Sclear  
Illegal command: Sclear.  
Z:\>S_
```

We have Entered the random command and output is Illegal command means this command is not in the instruction sets of Assembly language -

Step 4

```
Z:\>x:  
X:\>S
```

By entering the command x: we have entered to the directory in first step we called the directory as x -

Step 5

```
X:\>nasm _test.asm  
X:\>S_
```

By entering this command we confirmed that we are in the right directory -

Step 6

```
X:\>nasm _test.asm -o _test.com
```

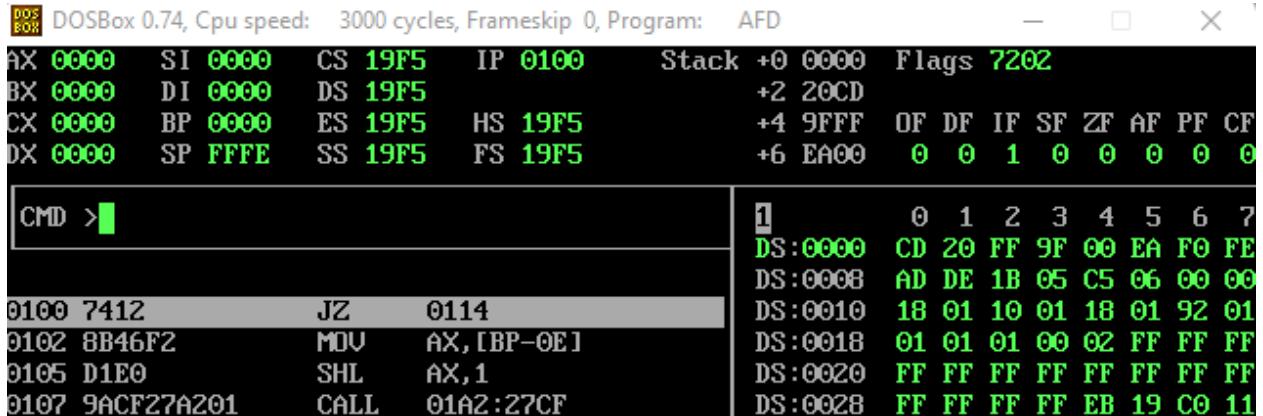
We have created the executubale file with extension **.com** ,as same as we have .exe file in c++.

Step 7

```
X:\>afd _test.com
```

By entering **afd** we have opened the **.com** extension file for debugging .

Step 8



DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: AFD

AX	0000	SI	0000	CS	19F5	IP	0100	Stack	+0	0000	Flags	7202
BX	0000	DI	0000	DS	19F5				+2	20CD		
CX	0000	BP	0000	ES	19F5	HS	19F5		+4	9FFF	OF DF IF SF ZF AF PF CF	
DX	0000	SP	FFFE	SS	19F5	FS	19F5		+6	EA00	0 0 1 0 0 0 0 0 0	

CMD > []

1	0	1	2	3	4	5	6	7
DS:0000	CD	20	FF	9F	00	EA	F0	FE
DS:0008	AD	DE	1B	05	C5	06	00	00
DS:0010	18	01	10	01	18	01	92	01
DS:0018	01	01	01	00	02	FF	FF	FF
DS:0020	FF							
DS:0028	FF	FF	FF	FF	EB	19	C0	11

0100 7412 JZ 0114
0102 8B46F2 MOV AX,[BP-0E]
0105 D1E0 SHL AX,1
0107 9ACF27A201 CALL 01A2:27CF

By entering the command we entered to the debugger -

