Question 1:

```
C:\>edit LAb1_t1.asm

C:\>masm Lab1_t1.asm;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987.  All rights reserved.


 51700 + 464844 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors
```

```
C:\>link Lab1_t1.obj

Microsoft (R) Overlay Linker  Version 3.60
Copyright (C) Microsoft Corp 1983-1987.  All rights reserved.

Run File [LAB1_T1.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:\>Lab1_t1.exe
A
```

DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Progra

File Edit Search View Options Help

C:\LAB1_T1.ASM

```
dosseg          _;disk op system segment
.model small    ;max 16 bit code
.stack 100h     ;starting adderess 100hexa decimal
.data           ;variable declaration
.code           ;all code
main proc       ;Define the start of main procedure
mov dl,'A'      ;A is declared
mov ah,2        ;output
int 21h         ;intrupt
mov ah,4ch      ;exit
int 21h         ;intrupt
main endp       ;end of main procedure
end main        ;end of main programe
```

Question 2:

```
C:\>edit Lab1_q2.asm

C:\>masm Lab1_q2.asm;
Microsoft (R) Macro Assembler Version 5.00
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  51700 + 464844 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors

C:\>link Lab1_q2.obj

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Run File [LAB1_Q2.EXE]:
List File [NUL.MAP]:
Libraries [.LIB]:

C:\>Lab1_q2.exe
BILAL
C:\>_
```

DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, P

File Edit Search View Options Help

C:\LAB1_Q2.ASM

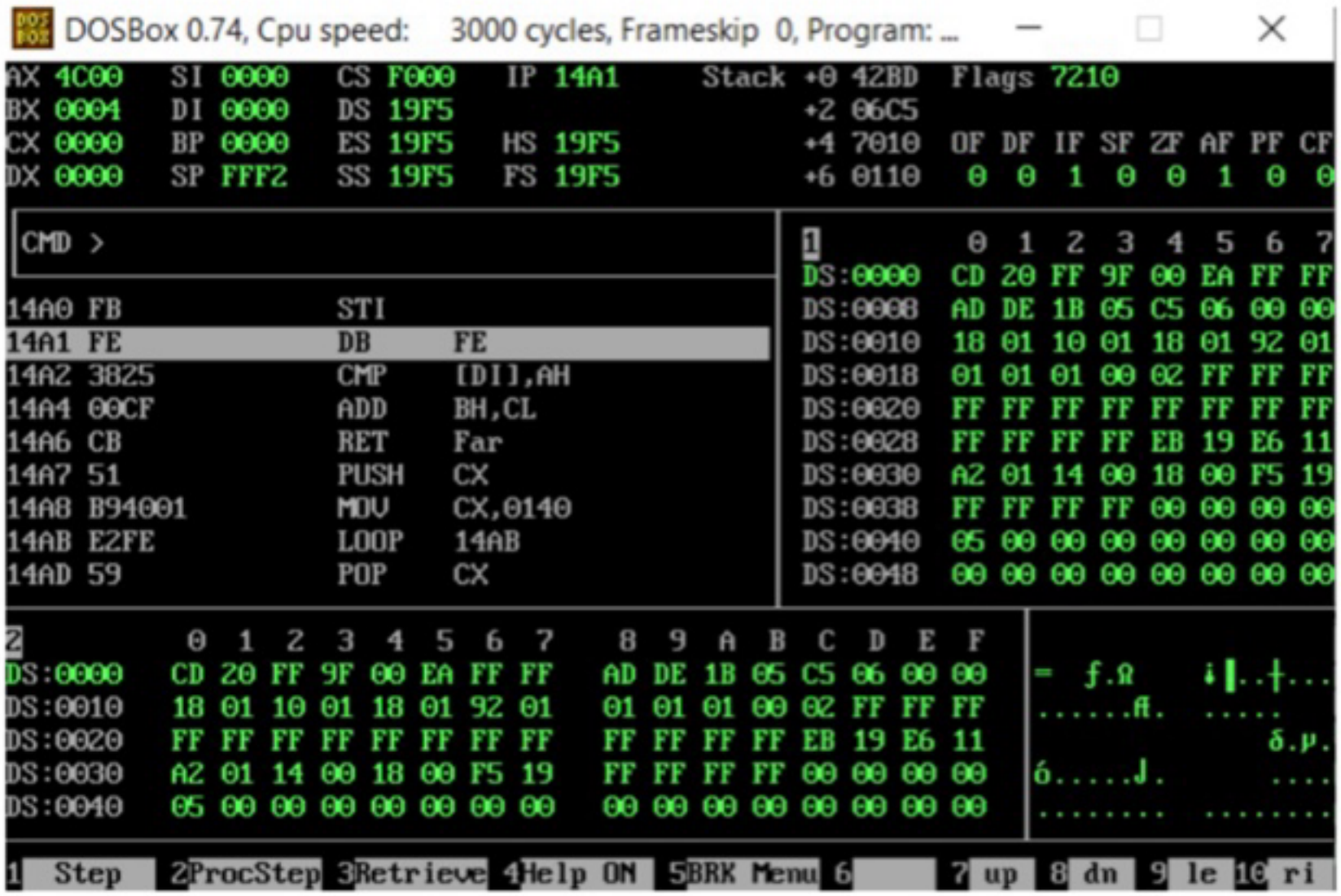
```
dosseg              ;disk op system segment
.model small        ;maximum 16 bit code
.stack 100h          ;starting adderess 100h
.data               ;variable declaratin
.code               ;All code
main proc           ;main procedure start from here
mov dl,'B'          ;B is declared
mov ah,2            ;Output odf B
int 21h             ;interput
mov dl,'I'          ;Declaration
mov ah,2            ;Output of I
int 21h             ;Intrupt
mov dl,'L'          ;again declaration
mov ah,2            ;Output of L
int 21h             ;Intruption
mov dl,'A'          ;declaration Of A
mov ah,2            ;Output of A
int 21h             ;Intrupt
mov dl,'L'          ;declaration of variable L
mov ah,2            ;Output of Variable
int 21h             ;Intrupt
mov ah,4ch          ;Exit
int 21h            ;intrupt
main endp          ;end of procedure
end main           ;end of main programe
```

Question3:

```
C:\>Nasm Lab1_q3.asm -0 Lab1_q3.com
nasm: error: unrecognised option `-0'
nasm: error: more than one input file specified
type `nasm -h' for help

C:\>Nasm Lab1_q3.asm -o Lab1_q3.com

C:\>Lab1_q3.com

C:\>Nasm Lab1_q3.asm -l Lab1_q3.lst

C:\>Type Lab1_q3.lst
     1                                  [org 0x100]  ;it indicates that first da
ta will be stiore at 100h
     2 00000000 B80A00                  mov ax,10    ;Assigning value
     3 00000003 BB0F00                  mov bx,15    ;assigning value
     4 00000006 01D8                    add ax,bx    ;adding both numbers
     5 00000008 BB0400                  mov bx,4     ;overwrite bx with 4.previou
s value is lost
     6 0000000B B8004C                  mov ax,0x4c00;terminating the programe
     7 0000000E CD21                    int 0x21     ;Intrupt
     8
```

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

```
File  Edit  Search  View  Options  Help
                    C:\LAB1_Q3.ASM
[org 0x100]  ;it indicates that first data will be stiore at 100h
mov ax,10    ;Assigning value
mov bx,15    ;assigning value
add ax,bx    ;adding both numbers
mov bx,4     ;overwrite bx with 4.previous value is lost
mov ax,0x4c00;terminating the programe
int 0x21     ;Intrupt
```


DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...
AX 4C00 SI 0000 CS F000 IP 14A1 Stack +0 42BD Flags 7210
BX 0004 DI 0000 DS 19F5 +2 06C5
CX 0000 BP 0000 ES 19F5 HS 19F5 +4 7010 OF DF IF SF ZF AF PF CF
DX 0000 SP FFF2 SS 19F5 FS 19F5 +6 0110 0 0 1 0 0 1 0 0
CMD >
14A0 FB STI
14A1 FE DB FE
14A2 3825 CMP [DI],AH
14A4 00CF ADD BH,CL
14A6 CB RET Far
14A7 51 PUSH CX
14A8 B94001 MOV CX,0140
14AB E2FE LOOP 14AB
14AD 59 POP CX
1 0 1 2 3 4 5 6 7
DS:0000 CD 20 FF 9F 00 EA FF FF
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 FF FF FF FF FF FF FF
DS:0028 FF FF FF FF EB 19 E6 11
DS:0030 A2 01 14 00 18 00 F5 19
DS:0038 FF FF FF FF 00 00 00 00
DS:0040 05 00 00 00 00 00 00 00
DS:0048 00 00 00 00 00 00 00 00
2 0 1 2 3 4 5 6 7 8 9 A B C D E F
DS:0000 CD 20 FF 9F 00 EA FF FF AD DE 1B 05 C5 06 00 00
DS:0010 18 01 10 01 18 01 92 01 01 01 01 00 02 FF FF FF
DS:0020 FF FF FF FF FF FF FF FF FF FF FF FF EB 19 E6 11
DS:0030 A2 01 14 00 18 00 F5 19 FF FF FF FF 00 00 00 00
DS:0040 05 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1 Step 2 ProcStep 3 Retrieve 4 Help ON 5 BRK Menu 6 7 up 8 dn 9 le 10 ri