

Computer Organization & Assembly Language

Lab-3

Assembly Program to take input from user and print on screen (write a code using DosBox Edit) and save as **abc.asm**

```
dosseg ;dos segment      mov ah,4ch
.model small             INT 21hMain endp
.stack 100h              End Main
.data
.code
Main proc
Mov ah,1
INT 21h

Mov dl,al
mov ah,2
INT 21h
```

DosBox Commands

- Edit Filename.asm (to create new file if not exists/open existing file)
- MASM Filename.asm; (to convert into object file using MASM assembler)
- LINK Filename.obj; (to convert object file into execution file using linker)
- To execute the exe file you just created,
 - Filename.exe (it will execute)
- NOTE: (Semicolon is mandatory while converting via assembler and linker only)

Assembly Program to add two numbers (write a code using DosBox Edit) and save as abc.asm

```
dosseg ;dos segment      mov ah,4ch
.model small             INT 21h
.stack 100h             Main endp
.data                   End Main
.code
Main proc
Mov bl,1
Mov cl,2
Add bl,cl
Add bl,48
Mov dl,bl
Mov ah,2
INT 21h
```

DosBox Commands

- Edit Filename.asm (to create new file if not exists/open existing file)
- MASM Filename.asm; (to convert into object file using MASM assembler)
- LINK Filename.obj; (to convert object file into execution file using linker)
- To execute the exe file you just created,
 - Filename.exe (it will execute)
- NOTE: (Semicolon is mandatory while converting via assembler and linker only)

Assembly Program to Subtract two numbers (write a code using DosBox Edit) and save as abc.asm

```
dosseg ;dos segment      mov ah,4ch
.model small             INT 21h
.stack 100h              Main endp
.data                    End Main
.code
Main proc
Mov bl,3
Mov cl,1
sub bl,cl
Add bl,48
Mov dl,bl
Mov ah,2
INT 21h
```

DosBox Commands

- Edit Filename.asm (to create new file if not exists/open existing file)
- MASM Filename.asm; (to convert into object file using MASM assembler)
- LINK Filename.obj; (to convert object file into execution file using linker)
- To execute the exe file you just created,
 - Filename.exe (it will execute)
- NOTE: (Semicolon is mandatory while converting via assembler and linker only)

Assembly Program to to input two numbers and add them
(write a code using DosBox Edit) and save as abc.asm

```
dosseg ;dos segment      mov dl,bl
.model small             mov ah,2
.stack 100h              INT 21h
.data
.code                   mov ah,4ch
Main proc                INT 21h
Mov ah,1                 Main endp
INT 21h                  End Main
mov bl,al
mov al,1
INT 21h
add bl,al
sub bl,48
```


DosBox Commands

- Edit Filename.asm (to create new file if not exists/open existing file)
- MASM Filename.asm; (to convert into object file using MASM assembler)
- LINK Filename.obj; (to convert object file into execution file using linker)
- To execute the exe file you just created,
 - Filename.exe (it will execute)
- NOTE: (Semicolon is mandatory while converting via assembler and linker only)

Assembly Program to convert Capital letter into small letter (write a code using DosBox Edit) and save as abc.asm

```
dosseg ;dos segment      mov ah,4ch
.model small             INT 21h
.stack 100h             Main endp
.data                   End Main
.code
Main proc
Mov ah,1
INT 21h

Mov dl,al
add dl,32
Mov ah,2
INT 21h
```

DosBox Commands

- Edit Filename.asm (to create new file if not exists/open existing file)
- MASM Filename.asm; (to convert into object file using MASM assembler)
- LINK Filename.obj; (to convert object file into execution file using linker)
- To execute the exe file you just created,
 - Filename.exe (it will execute)
- NOTE: (Semicolon is mandatory while converting via assembler and linker only)