

LAB NO#11

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20i-1884

Section B

Q1.

```
INCLUDE task.inc
.MODEL SMALL
.STACK 100H
.DATA

.CODE

main proc
    mov ax, @data
    mov ds, ax
    Name1 'A',1
    Name1 'B',2

    mov ah, 4ch
    int 21h
main endp
end main
```

```
Name1 macro char, num
    mov dx, 0;
    mov dl, char
    mov ah, 02h
    int 21h
    mov dx, 0
    mov dl, num
    add dl, 48
    mov ah, 02h
    int 21h
endm
```

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...
Run File [task.exe]: "task.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\>task.exe
A1B2
C:\>ml task.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.

Assembling: task.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.

Object Modules [.obj]: task.obj
Run File [task.exe]: "task.exe"
List File [nul.map]: NUL
Libraries [.lib]:
Definitions File [nul.def]:

C:\>task.exe
A1B2
C:\>
```

Q2.

```
INCLUDE task.inc
.MODEL SMALL
.STACK 100
.DATA

.CODE
MAIN PROC

    MOV AX,@DATA
    MOV DS,AX

    MYMACRO 'A', 26

MOV AH,4CH
INT 21H

MAIN ENDP
END MAIN

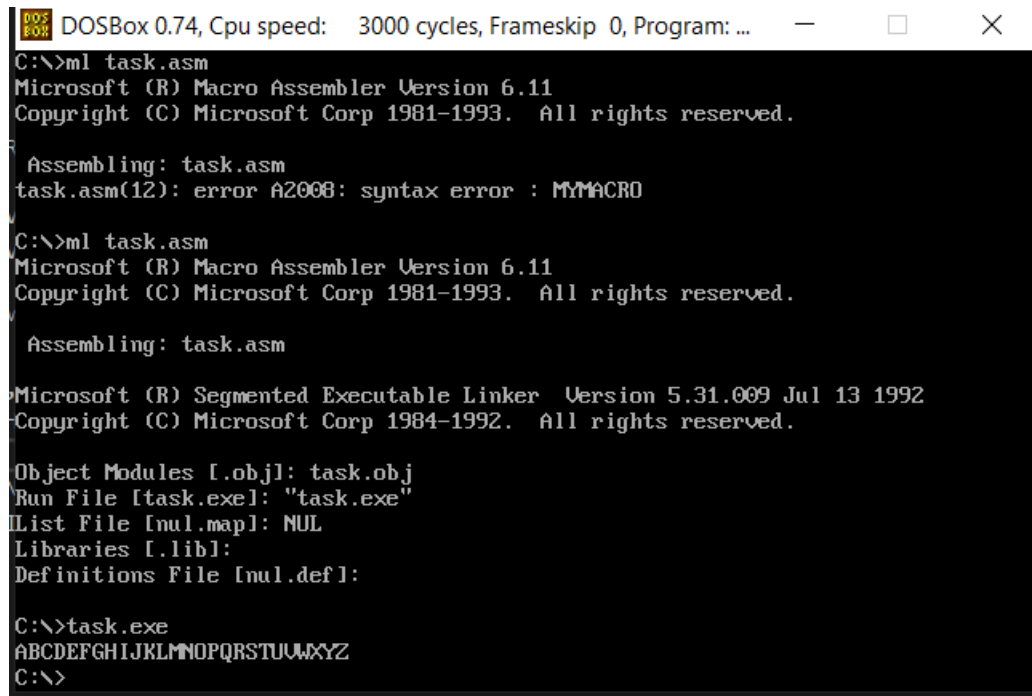
MYMACRO MACRO CHAR ,NUM

    MOV AL , CHAR

    MOV CX , NUM
L1:
    MOV DL , AL
    MOV AH , 02
    INT 21H

    INC AL
    LOOP L1
```

ENDM



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...
C:\>ml task.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.

Assembling: task.asm
task.asm(12): error A2008: syntax error : MYMACRO

C:\>ml task.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.

Assembling: task.asm

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.

Object Modules [.obj]: task.obj
Run File [task.exe]: "task.exe"
List File [nul.map]: NUL
Libraries [libl]:
Definitions File [nul.def]:

C:\>task.exe
ABCDEFGHIJKLMNOPQRSTUVWXYZ
C:\>
```

Q3.

```
.MODEL SMALL
.STACK 100
Student struct
Full_name db "Ahmed Baig$"
roll_no db " 20I-1884$"
city db " Islamabad$"
Student ends

.DATA
var1 Student <>

.CODE
MAIN PROC

    mov ax, @data
    mov ds, ax

    mov dx, offset var1.Full_name
    mov ah, 09
    int 21h

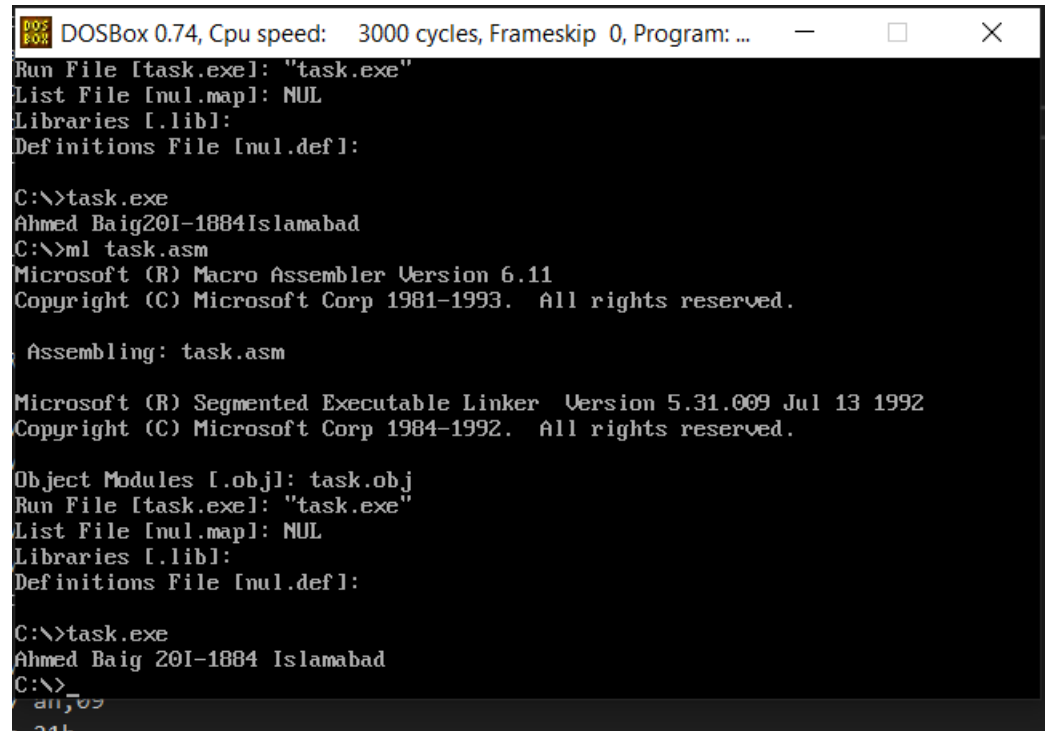
    mov dx, offset var1.roll_no
    mov ah, 09
    int 21h

    mov dx, offset var1.city
    mov ah, 09
```

```
int 21h
```

```
MOV AH,4CH  
INT 21H
```

```
MAIN ENDP  
END MAIN
```



```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...  
Run File [task.exe]: "task.exe"  
List File [nul.map]: NUL  
Libraries [.lib]:  
Definitions File [nul.def]:  
  
C:\>task.exe  
Ahmed Baig20I-1884Islamabad  
C:\>ml task.asm  
Microsoft (R) Macro Assembler Version 6.11  
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.  
  
. Assembling: task.asm  
  
Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992  
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.  
  
Object Modules [.obj]: task.obj  
Run File [task.exe]: "task.exe"  
List File [nul.map]: NUL  
Libraries [.lib]:  
Definitions File [nul.def]:  
  
C:\>task.exe  
Ahmed Baig 20I-1884 Islamabad  
C:\>
```

Q4

```
.MODEL SMALL
```

```
.STACK 100H
```

```
.data
```

```
fname db 'first.txt'
```

```
fhandle dw 0
```

```
.code
```

```
main proc
```

```
mov ax,@data
```

```
mov ds,ax
```

;CREATION OF FILE

mov ah,3ch

mov cl,0

mov dx,offset fname

int 21h

mov fhandle,ax

;CLOSING OF FILE




mov ah,3eh

mov bx,fhandle

int 21h

main endp

end main

 factorial.lst	28/01/2011 3:06 pm	MASM Listing
 FIRST	17/11/2021 4:25 pm	Text Document
 H2INC.ERR	13/12/2010 10:59 pm	ERR File

Q5

.MODEL SMALL

.STACK 100H

.data

fname db 'first.txt'

fhandle dw 0

buffer db 500 dup('\$')

msg db 'AHMED'

.code

main proc

mov ax,@data

mov ds,ax

;CREATION OF FILE

mov ah,3ch

mov cl,0

mov dx,offset fname

int 21h

;Loading file handles

```
mov dx,offset fname
mov cl,2
mov ah,3dh
int 21h
```

```
;Writing
mov cx,LENGTHOF msg
mov bx,ax
mov dx,offset msg
lea dx, msg
mov ah, 40h
int 21h
```

```
;CLOSING OF FILE
mov ah,3eh
int 21h
mov ah,4ch
int 21h
```

```
main endp
end main
```

