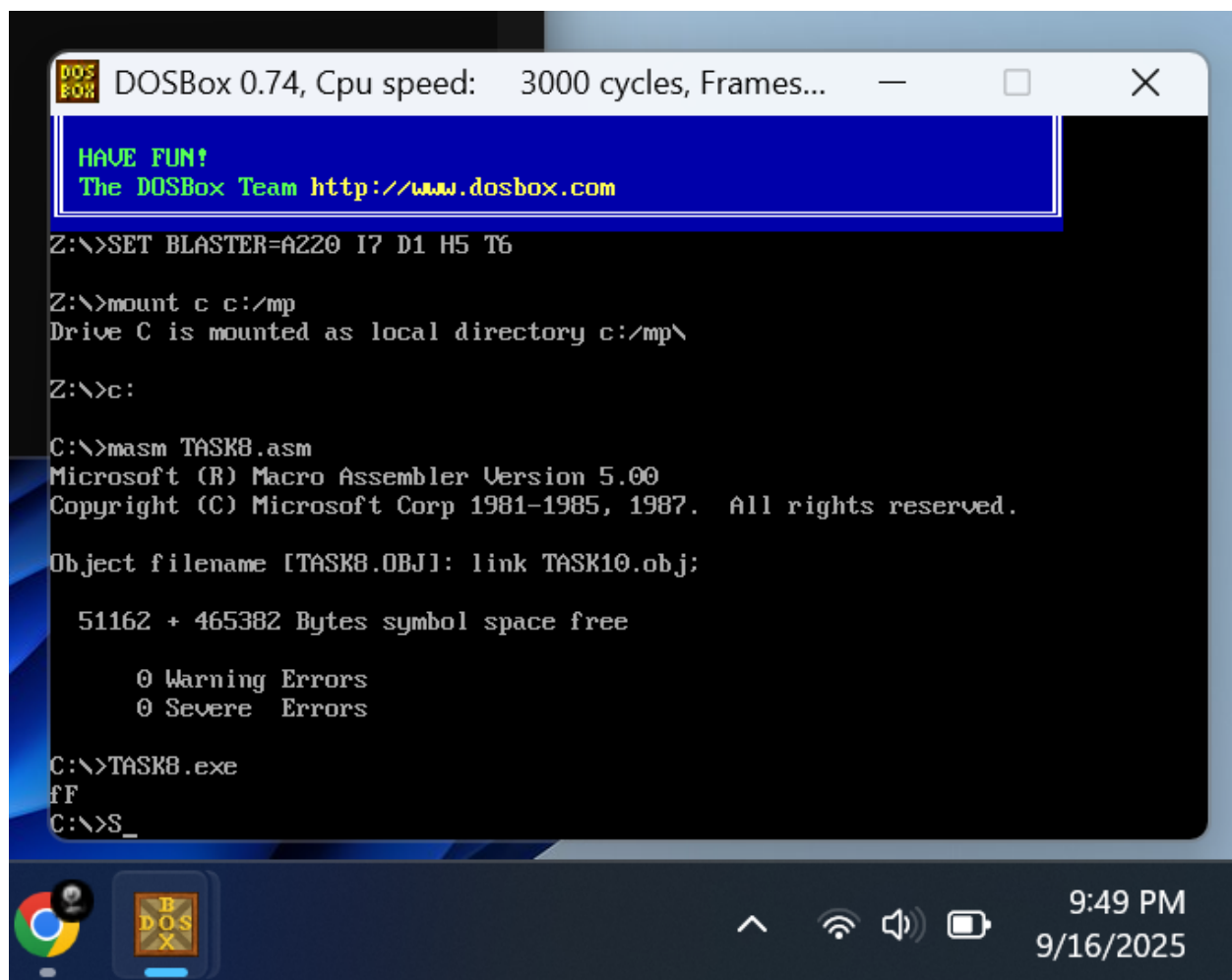# 67005_LAB_TASK_03_Saghir_Ali_COAL_AI 3-1

1. Write a MASM program that converts a given capital letter to small letter and a small letter to capital letter using ASCII values.

Small to Capital:

```
dosseg
.model small
.stack 100h
.data
.code
main proc
     mov ah,1
     int 21h
     mov dl,al
     sub dl,32
     mov ah,2
     int 21h
mov ah,4ch
int 21h
main endp
end main  S_
```

Capital to Small:

File Edit Search View Options Help

C:\CAPITAL1.ASM

```
$dosseg
.model small
.stack 100h
.data
.code
main proc
    mov ah,1
    int 21h
    mov dl,al
    add dl,32
    mov ah,2
    int 21h
mov ah,4ch
int 21h
main endp
end main
```

F1=Help   Line:1   Col:2

10:08 PM
9/16/2025

```
      0 Warning Errors
      0 Severe  Errors

C:\>capital1.exe
Illegal command: capital1.exe.

C:\>masm capital1.asm;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987.  All rights reserved.


  51690 + 464854 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors

C:\>link capital1.obj;

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


C:\>capital1.exe
Gg
C:\>D
```
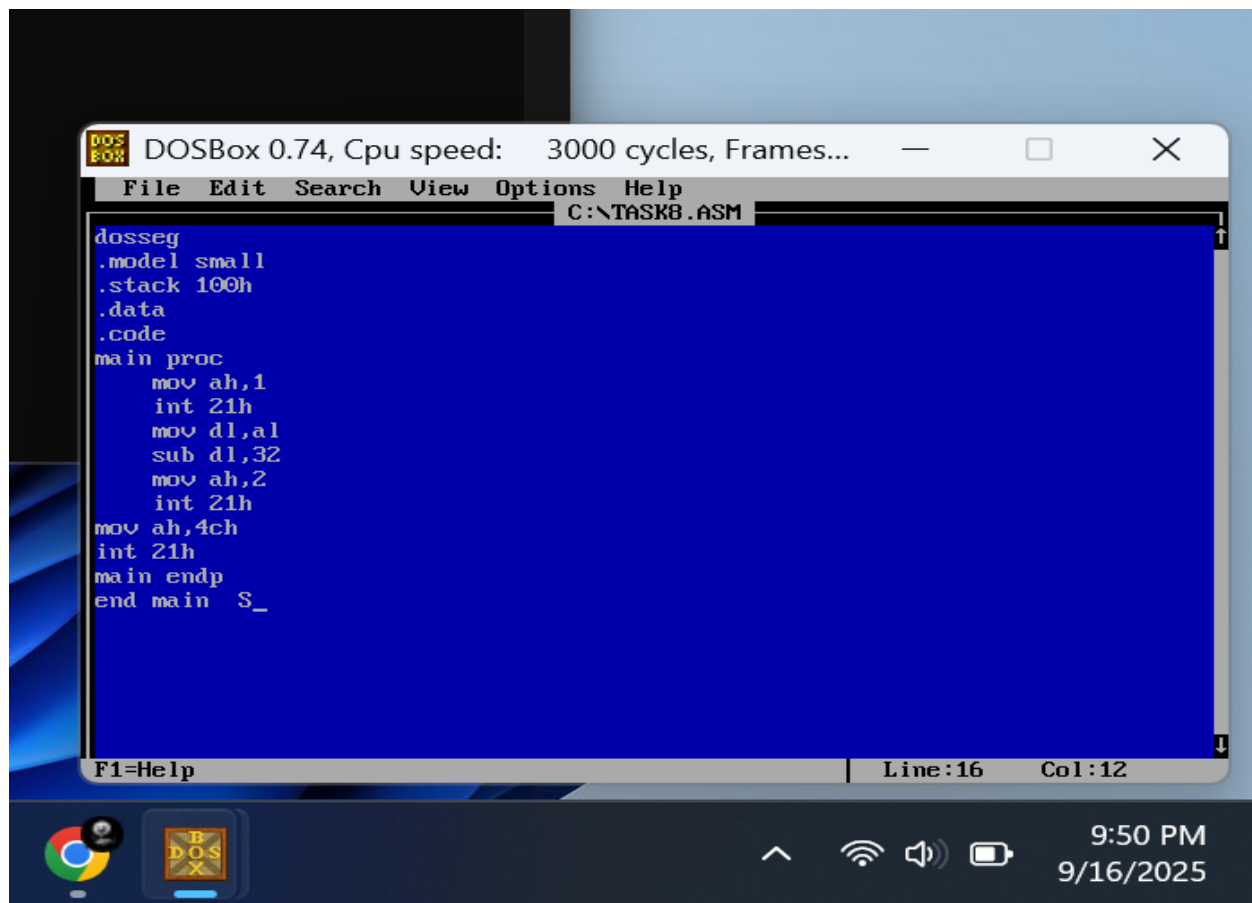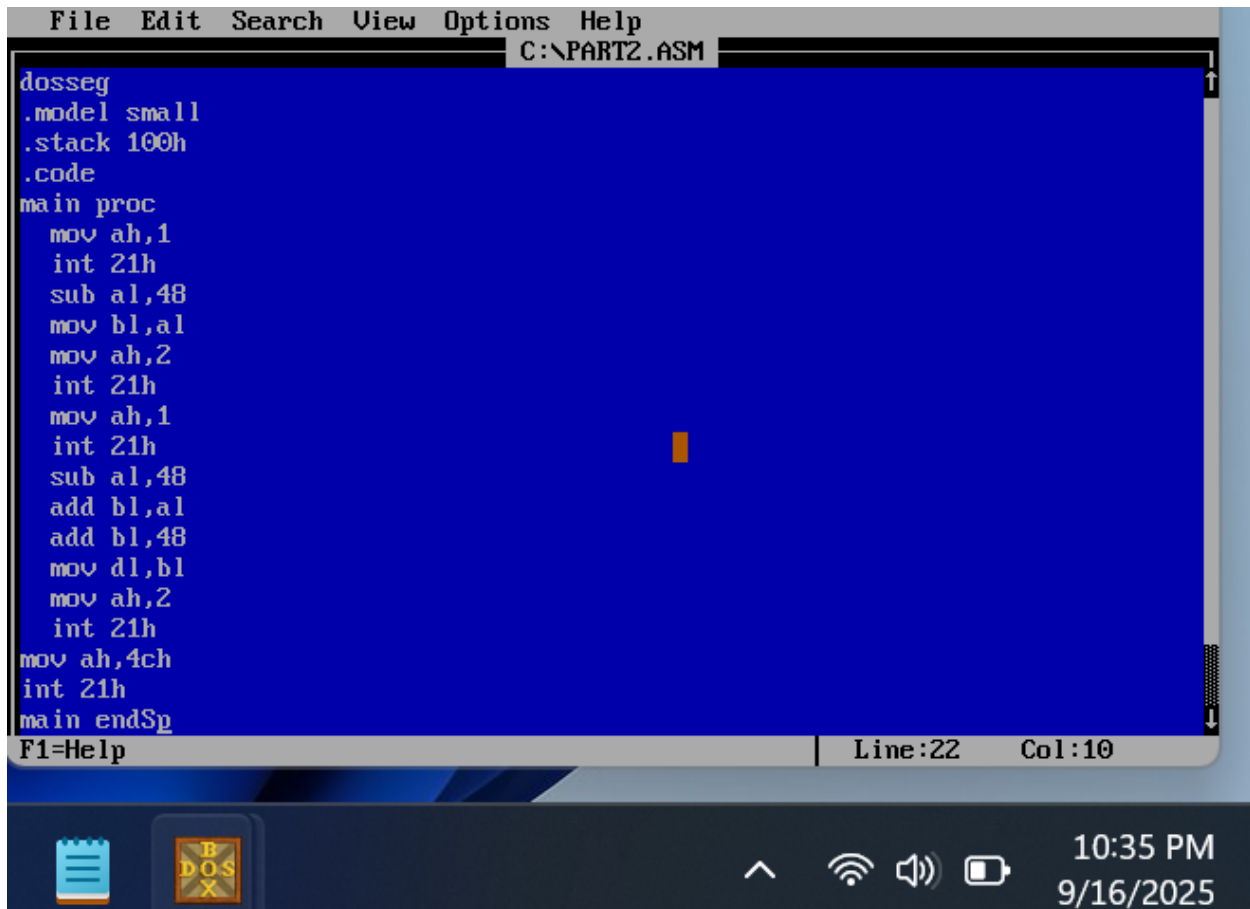
10:05 PM
9/16/2025

2. Write a MASM program that takes two single-digit inputs from the keyboard and displays their sum.

```
C:\PART2.ASM
dosseg
.model small
.stack 100h
.code
main proc
  mov ah,1
  int 21h
  sub al,48
  mov bl,al
  mov ah,2
  int 21h
  mov ah,1
  int 21h
  sub al,48
  add bl,al
  add bl,48
  mov dl,bl
  mov ah,2
  int 21h
mov ah,4ch
int 21h
main endSp
```

F1=Help   Line:22   Col:10

10:35 PM
9/16/2025

```
DOSBox 0.74, Cpu speed:    3000 cycles, Frames...   —   □   ✕

Drive C is mounted as local directory c:\mp\

Z:\>c:

C:\>edit part2.asm

C:\>masm part2.asm;
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987.  All rights reserved.


  51710 + 464834 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors

C:\>link part2.obj;

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C:\>part2.exe
1ff23
C:\>ddS
```