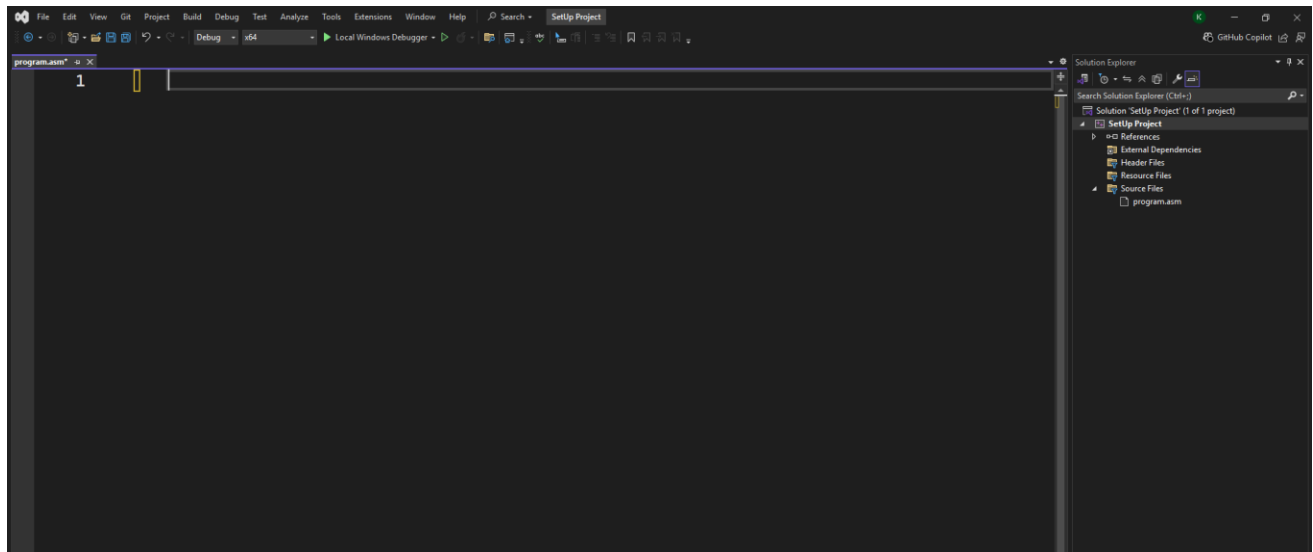


# LAB 01 TASKS – SYED HANZALA ALI -24K0025

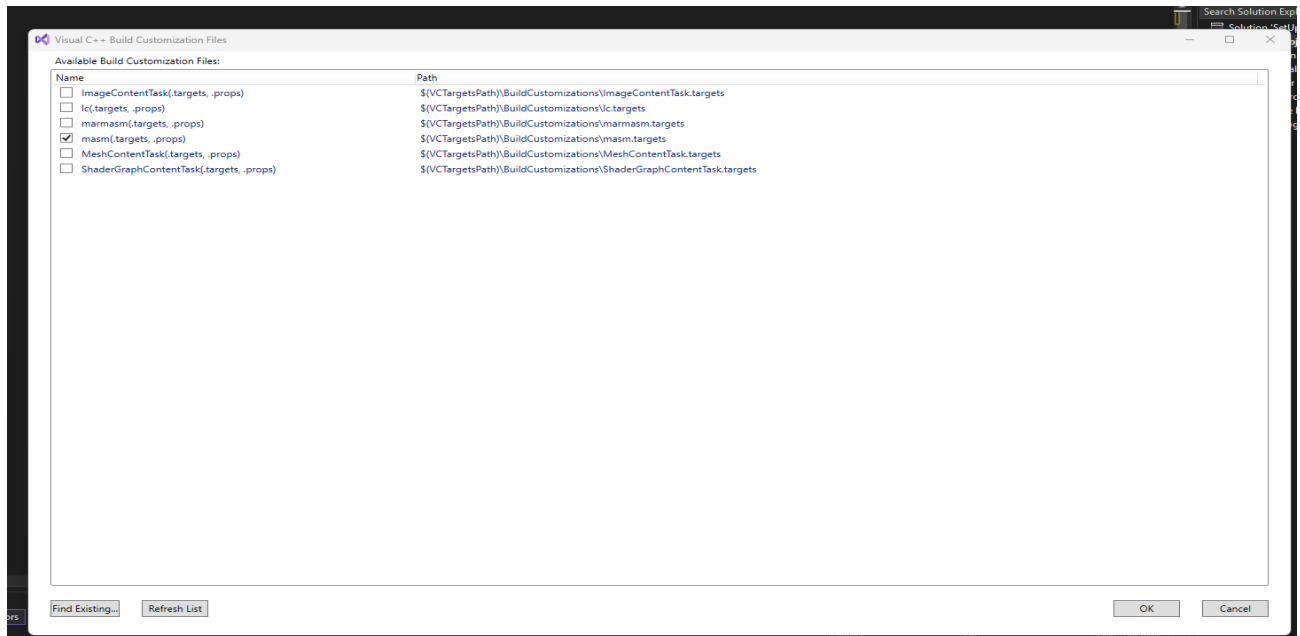
## TASK 01

STEP 1 : create new project – SetUp Project made

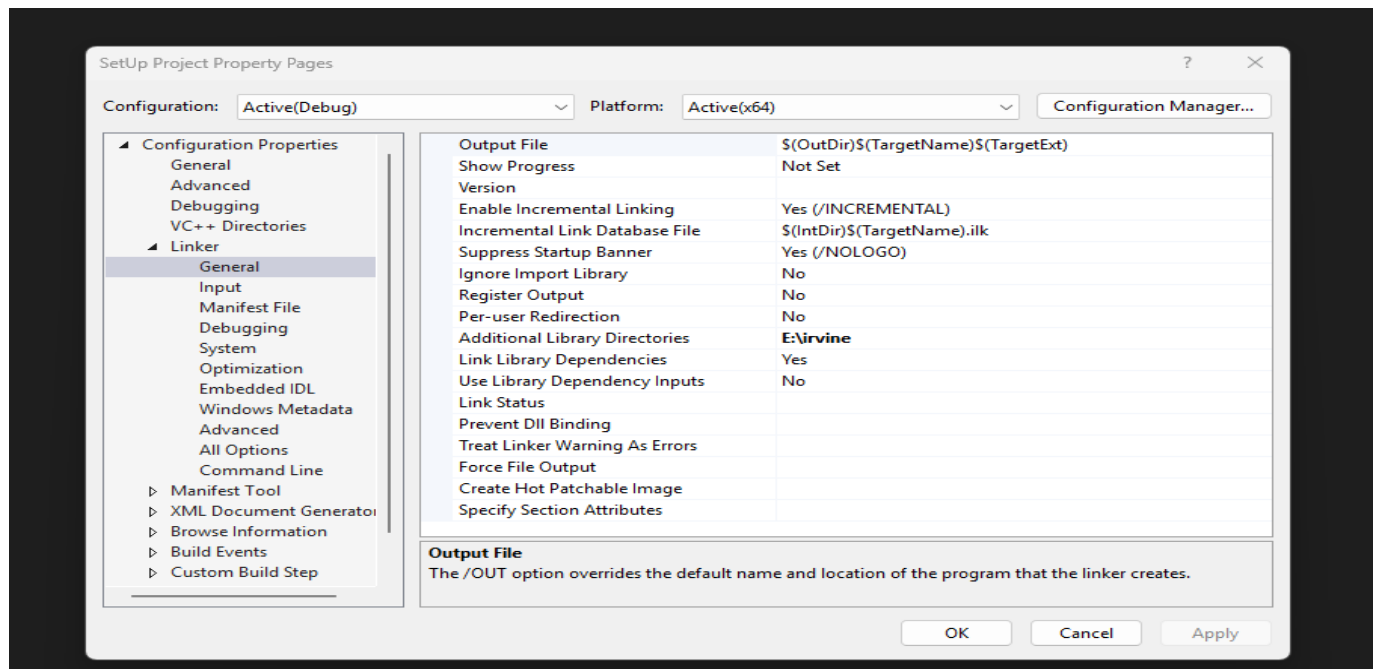
STEP 2 : Add an Assembly File – program.asm added



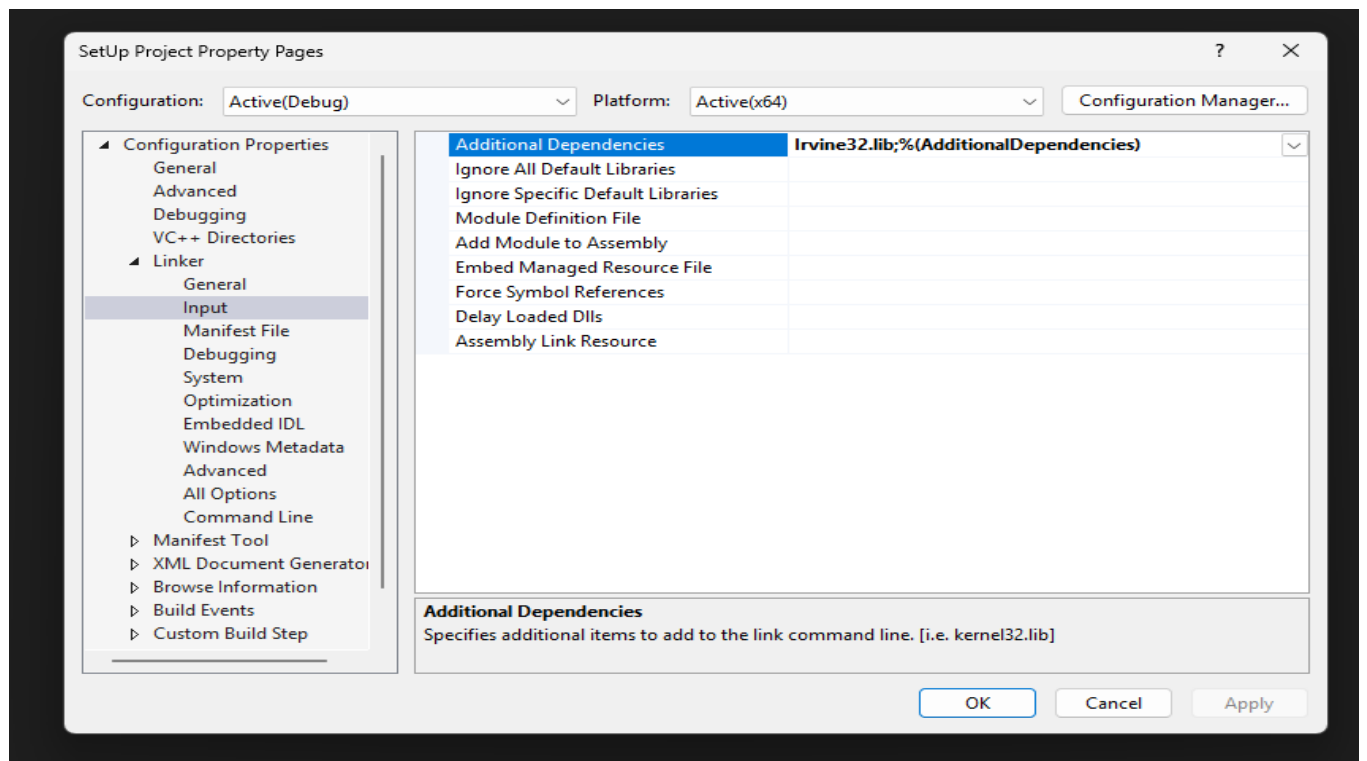
STEP 3 : ENABLE MASM - ENABLED



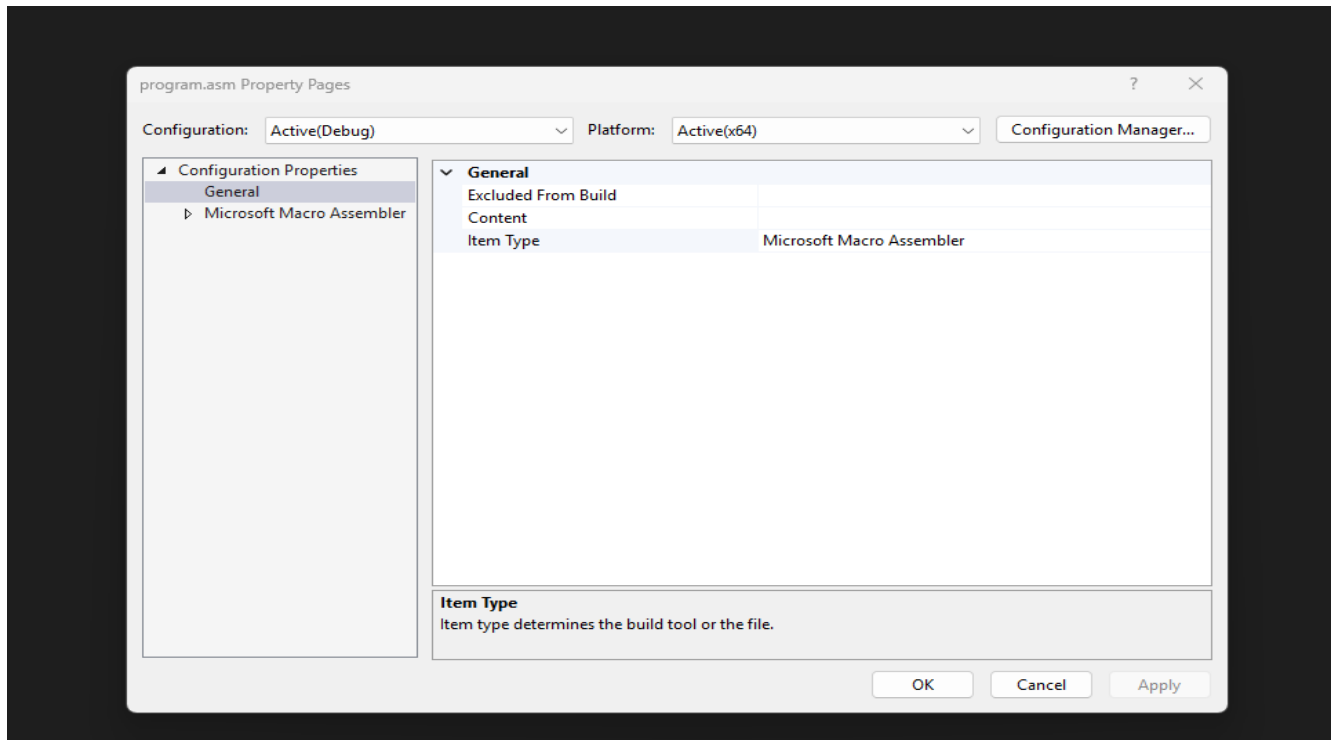
## STEP 4 : configure library Path – done in the pic below



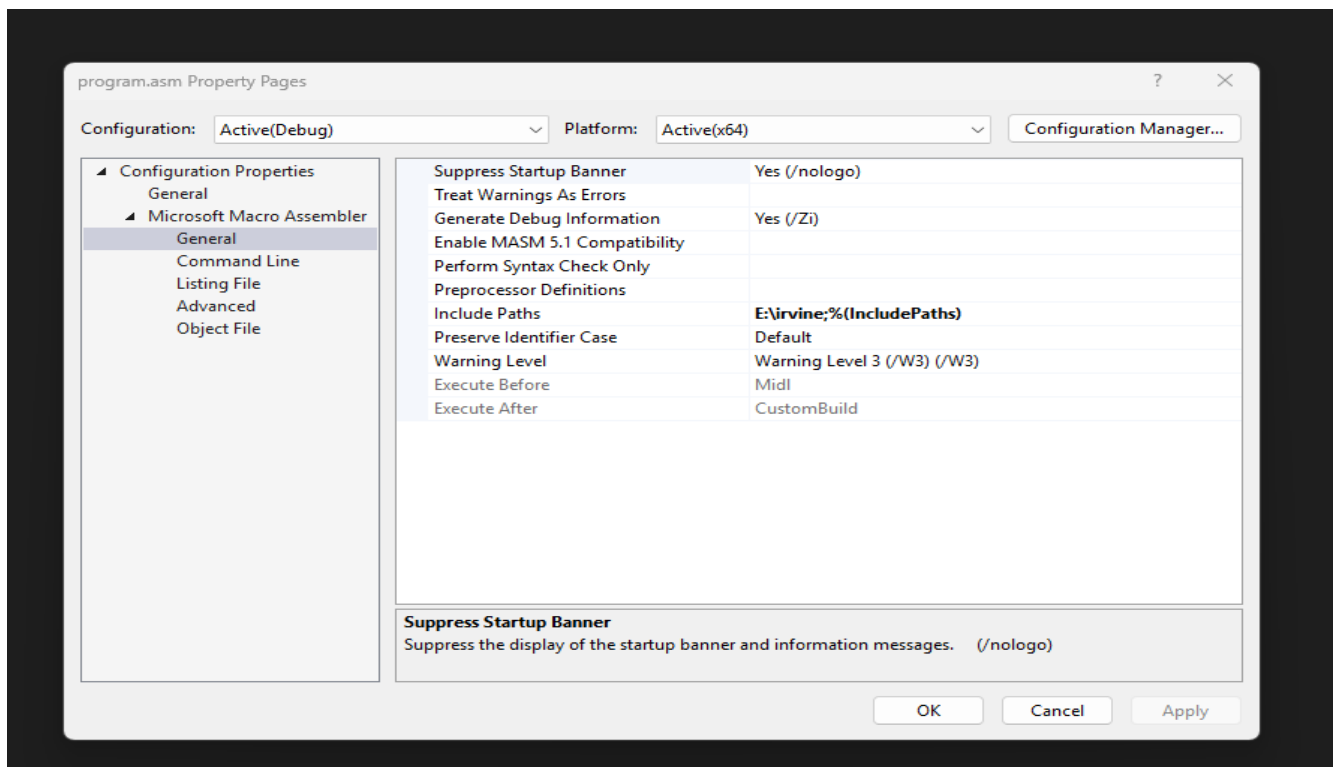
## STEP 5 : configure linker input – done in the pic below



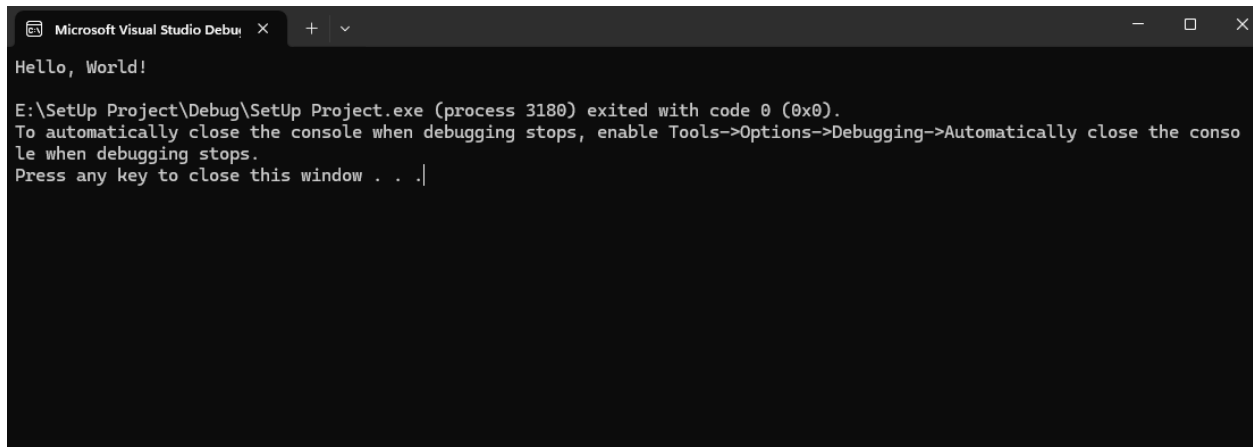
STEP 6 : configure ASM file Properties- done in the pic below



STEP 7 : Set Include Path

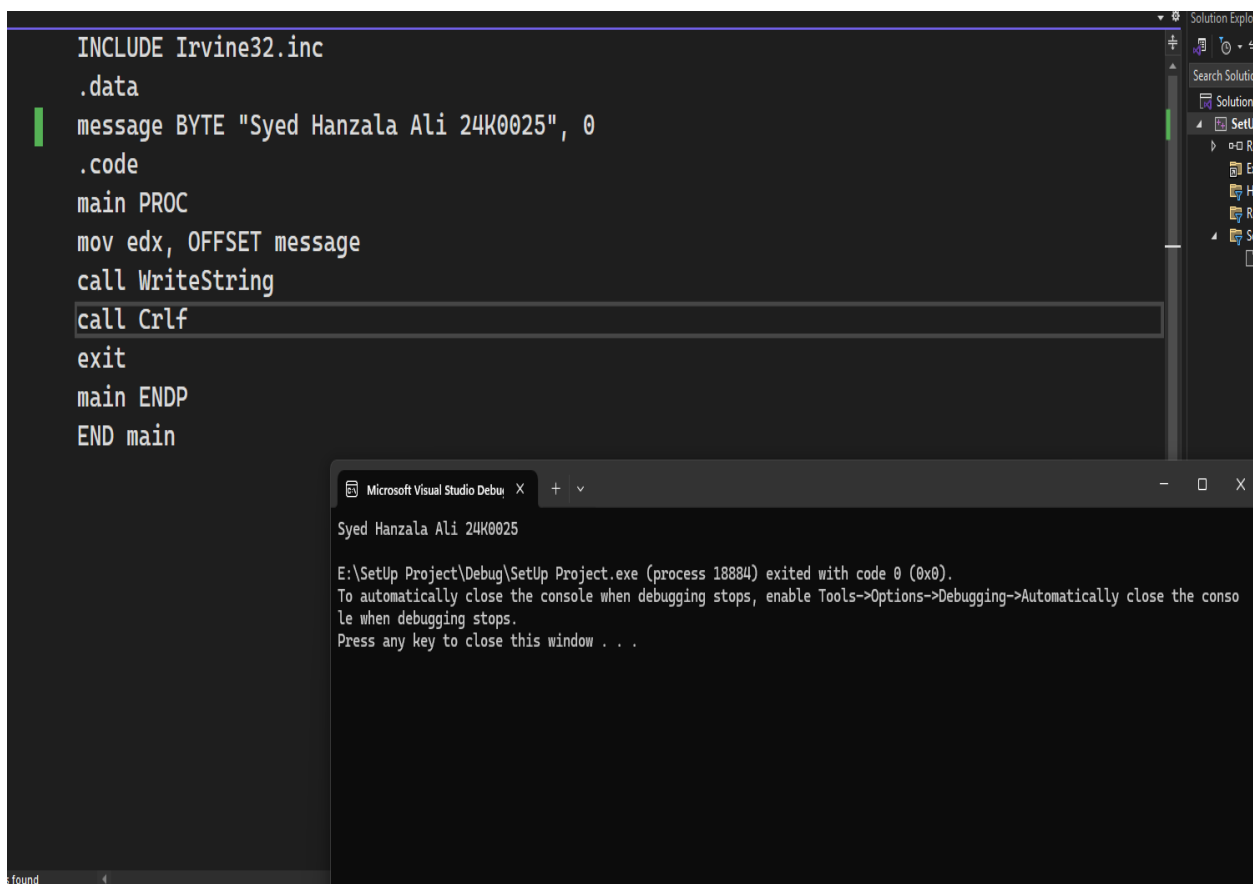


## STEP 8 : SAMPLE PROGRAM- HELLO WORLD PROGRAM



```
Microsoft Visual Studio Debug Console
Hello, World!
E:\SetUp Project\Debug\SetUp Project.exe (process 3180) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

## TASK 02



```
INCLUDE Irvine32.inc
.data
message BYTE "Syed Hanzala Ali 24K0025", 0
.code
main PROC
    mov edx, OFFSET message
    call WriteString
    call Crlf
    exit
main ENDP
END main
```

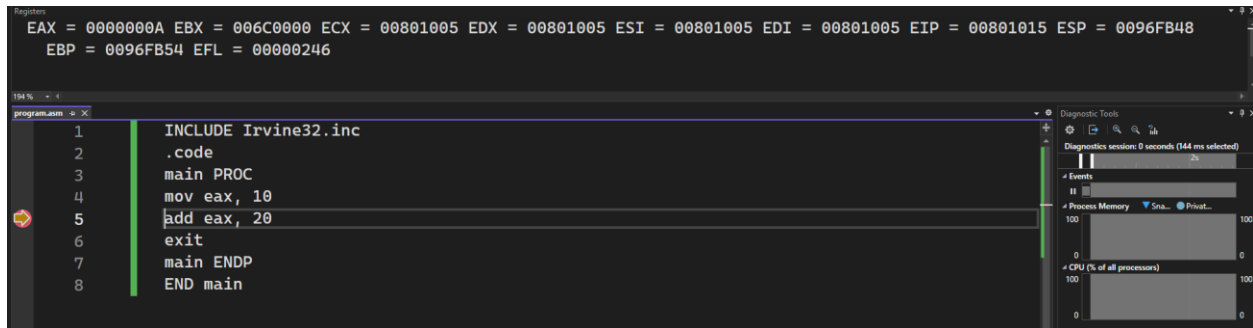
Microsoft Visual Studio Debug Console

```
Syed Hanzala Ali 24K0025
E:\SetUp Project\Debug\SetUp Project.exe (process 18884) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

## TASK 03

1. Prediction : the register value should become 30 after add eax 20 statement is run.

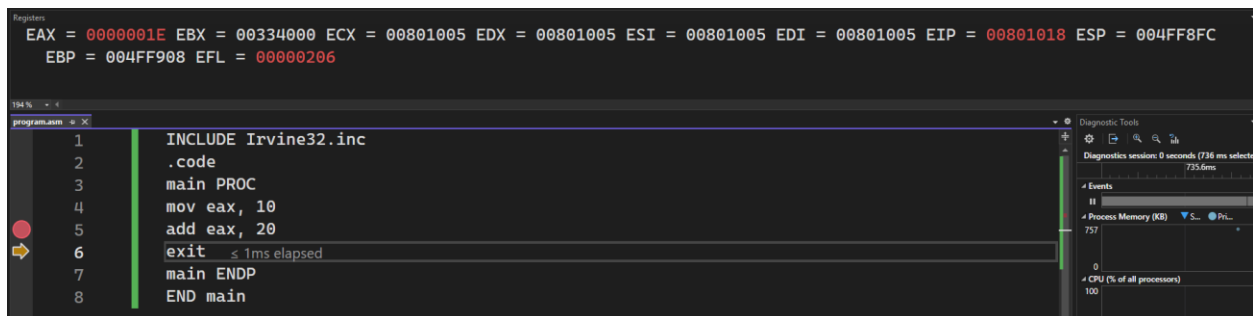
2. Before screenshot



```
Registers
EAX = 0000000A EBX = 006C0000 ECX = 00801005 EDX = 00801005 ESI = 00801005 EDI = 00801005 EIP = 00801015 ESP = 0096FB48
EBP = 0096FB54 EFL = 00000246

program.asm
1  INCLUDE Irvine32.inc
2  .code
3  main PROC
4  mov eax, 10
5  add eax, 20
6  exit
7  main ENDP
8  END main
```

3. After Screenshot



```
Registers
EAX = 0000001E EBX = 00334000 ECX = 00801005 EDX = 00801005 ESI = 00801005 EDI = 00801005 EIP = 00801018 ESP = 004FF8FC
EBP = 004FF908 EFL = 00000206

program.asm
1  INCLUDE Irvine32.inc
2  .code
3  main PROC
4  mov eax, 10
5  add eax, 20
6  exit ≤ 1ms elapsed
7  main ENDP
8  END main
```