

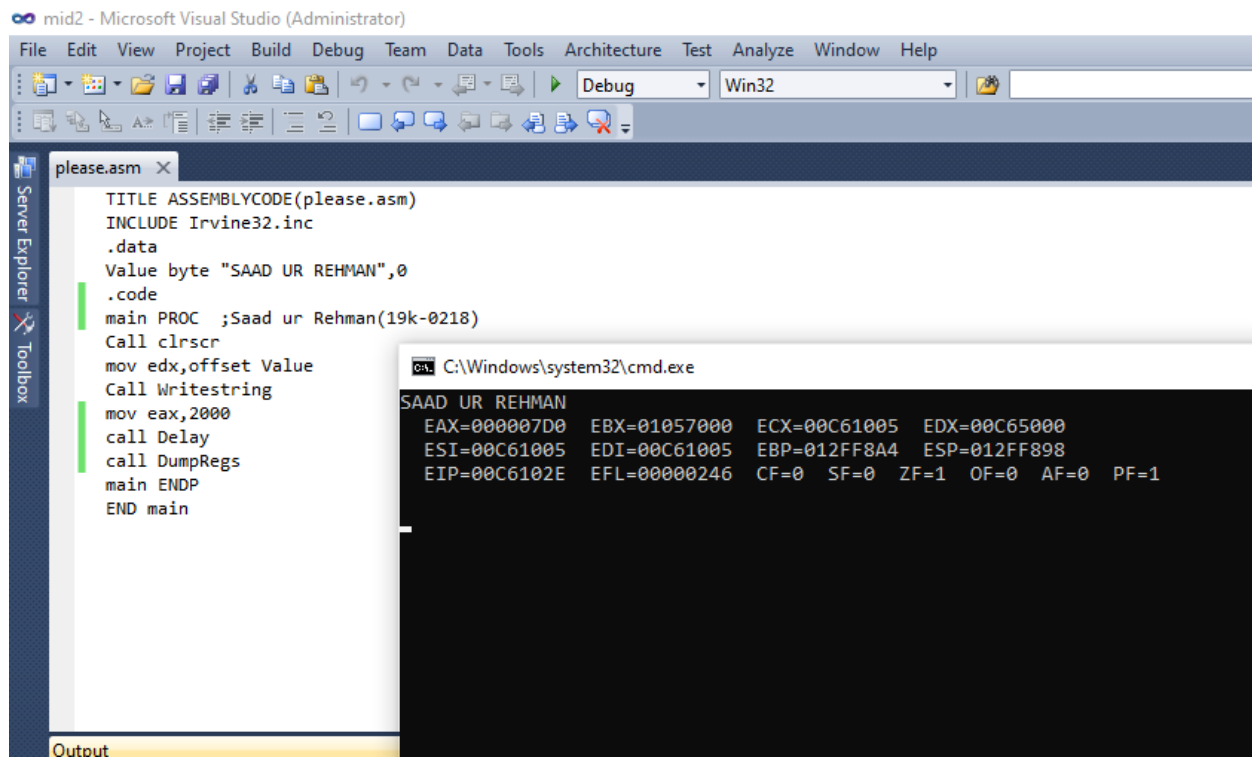
SAAD UR REHMAN

19k-0218

SEC: C

LAB 10/ LAB 11

Q1 :



The screenshot shows the Microsoft Visual Studio (Administrator) interface. The main window displays the assembly code for a file named 'please.asm'. The code includes Irvine32.inc, defines a data segment with a byte value 'SAAD UR REHMAN', and a main procedure that clears the screen, moves the address of the data segment into EDX, writes the string, delays, and dumps the registers. The assembly code is as follows:

```
TITLE ASSEMBLYCODE(please.asm)
INCLUDE Irvine32.inc
.data
Value byte "SAAD UR REHMAN",0
.code
main PROC ;Saad ur Rehman(19k-0218)
Call clrscr
mov edx,offset Value
Call Writestring
mov eax,2000
call Delay
call DumpRegs
main ENDP
END main
```

Below the code editor, a command prompt window is open, showing the output of the program. The output is the string 'SAAD UR REHMAN' followed by a list of register values:

```
C:\Windows\system32\cmd.exe
SAAD UR REHMAN
EAX=000007D0  EBX=01057000  ECX=00C61005  EDX=00C65000
ESI=00C61005  EDI=00C61005  EBP=012FF8A4  ESP=012FF898
EIP=00C6102E  EFL=00000246  CF=0   SF=0   ZF=1   OF=0   AF=0   PF=1
```

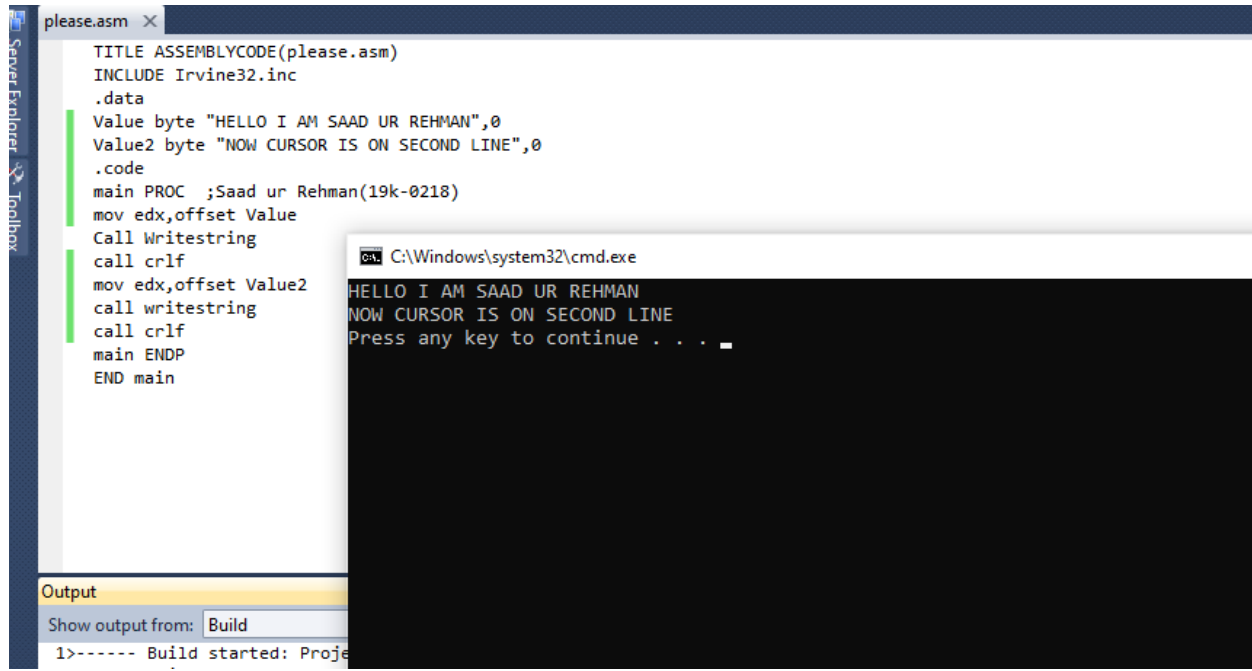
The bottom of the Visual Studio window shows the 'Output' window, which is currently empty.

Q2 :

SAAD UR REHMAN

19k-0218

SEC: C



The screenshot shows the Visual Studio IDE with the assembly file 'please.asm' open. The code defines two strings: 'HELLO I AM SAAD UR REHMAN' and 'NOW CURSOR IS ON SECOND LINE'. The 'main' procedure uses 'mov', 'call', and 'call crlf' instructions to print these strings. The 'Output' window shows the build process. A separate command prompt window displays the program's output, with the cursor moving to the second line after the first string is printed.

```
please.asm
TITLE ASSEMBLYCODE(please.asm)
INCLUDE Irvine32.inc
.data
Value byte "HELLO I AM SAAD UR REHMAN",0
Value2 byte "NOW CURSOR IS ON SECOND LINE",0
.code
main PROC ;Saad ur Rehman(19k-0218)
mov edx,offset Value
call Writestring
call crlf
mov edx,offset Value2
call writestring
call crlf
main ENDP
END main
```

Output

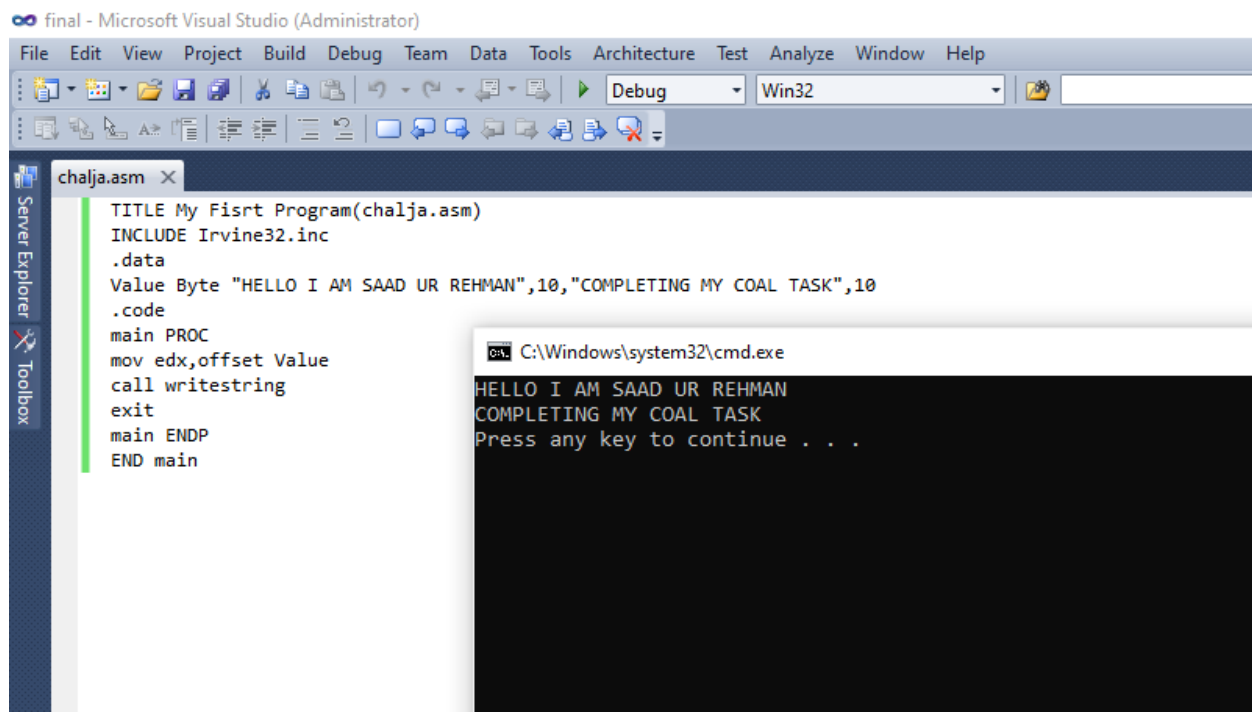
Show output from: Build

1>----- Build started: Project

C:\Windows\system32\cmd.exe

HELLO I AM SAAD UR REHMAN
NOW CURSOR IS ON SECOND LINE
Press any key to continue . . .

Q3 :



The screenshot shows the Visual Studio IDE with the assembly file 'chalja.asm' open. The code defines a single string 'HELLO I AM SAAD UR REHMAN' with a length of 10. The 'main' procedure uses 'mov', 'call writestring', and 'exit' instructions. The 'Output' window shows the build process. A separate command prompt window displays the program's output, showing the string and then waiting for a key press to continue.

```
chalja.asm
TITLE My Fisrt Program(chalja.asm)
INCLUDE Irvine32.inc
.data
Value Byte "HELLO I AM SAAD UR REHMAN",10,"COMPLETING MY COAL TASK",10
.code
main PROC
mov edx,offset Value
call writestring
exit
main ENDP
END main
```

C:\Windows\system32\cmd.exe

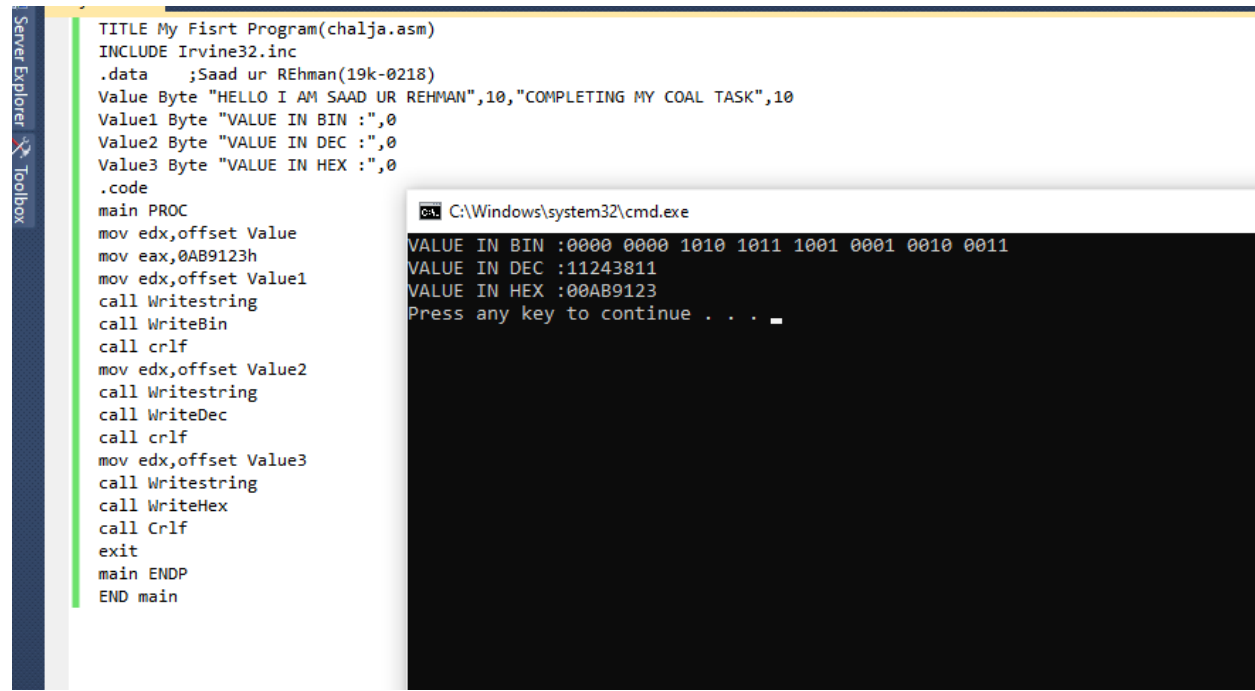
HELLO I AM SAAD UR REHMAN
COMPLETING MY COAL TASK
Press any key to continue . . .

SAAD UR REHMAN

19k-0218

SEC: C

Q4 :

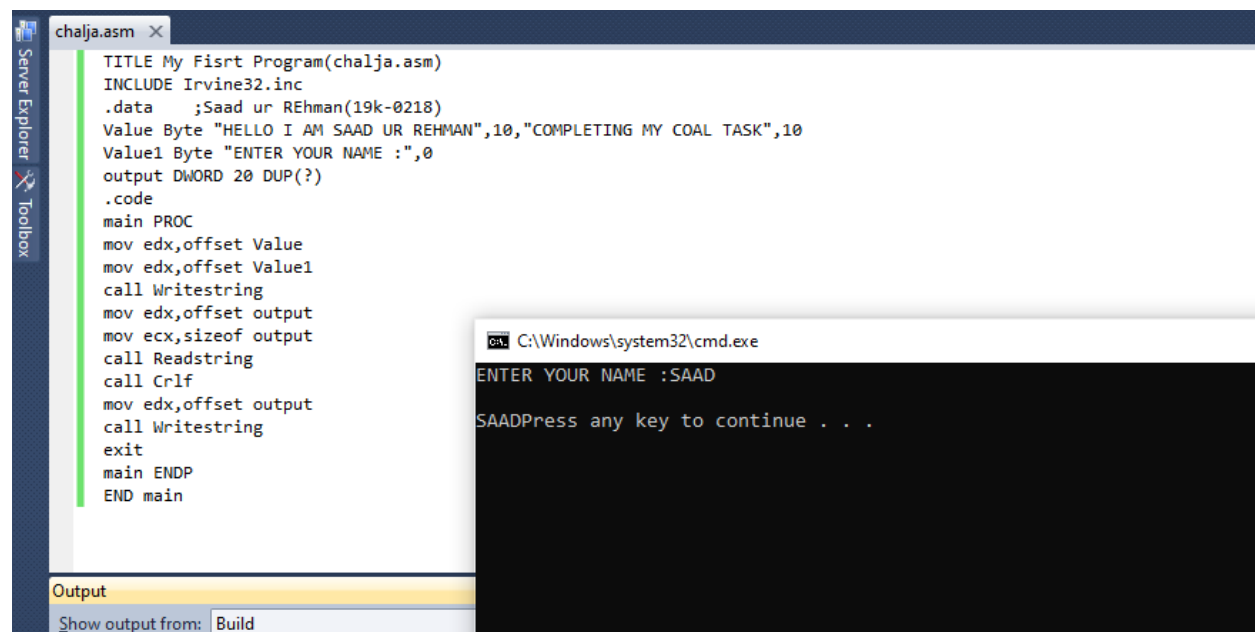


The screenshot shows the Visual Studio IDE with the assembly file `chalja.asm` open. The code defines a program that prints a message and three values in binary, decimal, and hexadecimal. The output window shows the program's execution results.

```
TITLE My Firsrt Program(chalja.asm)
INCLUDE Irvine32.inc
.data
    ;Saad ur REhman(19k-0218)
Value Byte "HELLO I AM SAAD UR REHMAN",10,"COMPLETING MY COAL TASK",10
Value1 Byte "VALUE IN BIN :",0
Value2 Byte "VALUE IN DEC :",0
Value3 Byte "VALUE IN HEX :",0
.code
main PROC
    mov edx,offset Value
    mov eax,0AB9123h
    mov edx,offset Value1
    call Writestring
    call WriteBin
    call crlf
    mov edx,offset Value2
    call Writestring
    call WriteDec
    call crlf
    mov edx,offset Value3
    call Writestring
    call WriteHex
    call Crlf
    exit
main ENDP
END main
```

```
C:\Windows\system32\cmd.exe
VALUE IN BIN :0000 0000 1010 1011 1001 0001 0010 0011
VALUE IN DEC :11243811
VALUE IN HEX :00AB9123
Press any key to continue . . .
```

Q5 :



The screenshot shows the Visual Studio IDE with the assembly file `chalja.asm` open. The code defines a program that prompts the user for their name and prints it. The output window shows the program's execution results.

```
chalja.asm
TITLE My Firsrt Program(chalja.asm)
INCLUDE Irvine32.inc
.data
    ;Saad ur REhman(19k-0218)
Value Byte "HELLO I AM SAAD UR REHMAN",10,"COMPLETING MY COAL TASK",10
Value1 Byte "ENTER YOUR NAME :",0
output DWORD 20 DUP(?)
.code
main PROC
    mov edx,offset Value
    mov edx,offset Value1
    call Writestring
    mov edx,offset output
    mov ecx,sizeof output
    call Readstring
    call Crlf
    mov edx,offset output
    call Writestring
    exit
main ENDP
END main
```

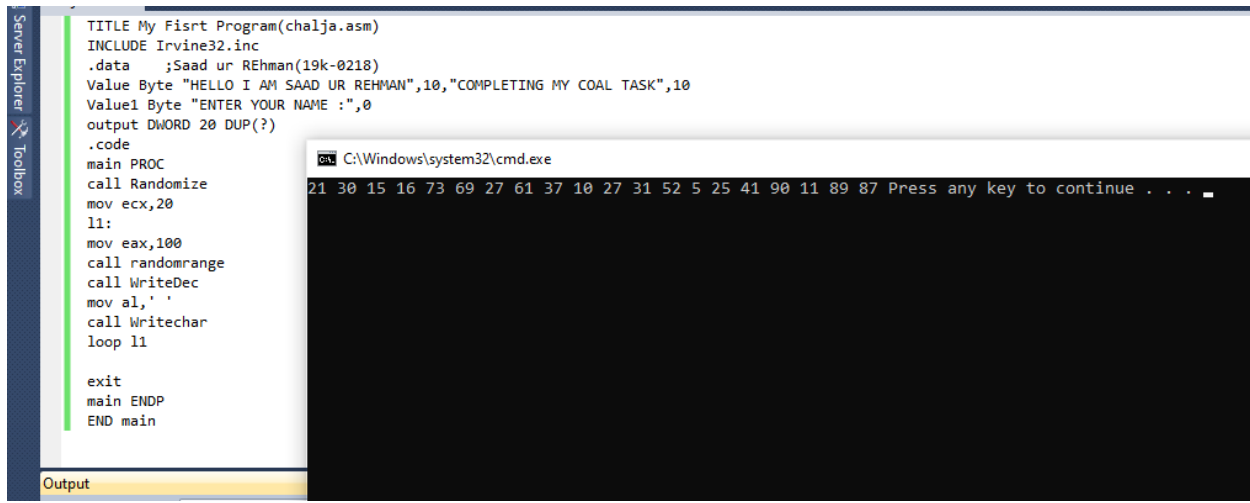
```
C:\Windows\system32\cmd.exe
ENTER YOUR NAME :SAAD
SAADPress any key to continue . . .
```

SAAD UR REHMAN

19k-0218

SEC: C

Q6 :



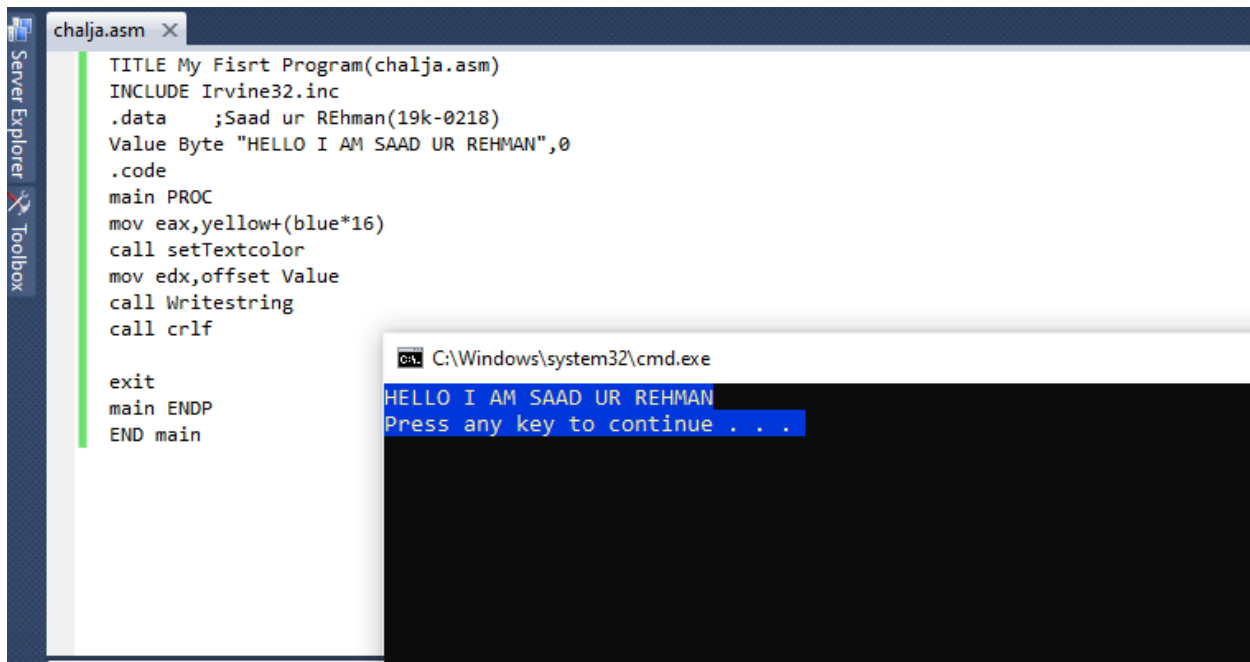
The screenshot shows a Windows assembly IDE with the following assembly code in the editor:

```
TITLE My Firsrt Program(chalja.asm)
INCLUDE Irvine32.inc
.data    ;Saad ur REhman(19k-0218)
Value Byte "HELLO I AM SAAD UR REHMAN",10,"COMPLETING MY COAL TASK",10
Value1 Byte "ENTER YOUR NAME :",0
output DWORD 20 DUP(?)
.code
main PROC
call Randomize
mov ecx,20
l1:
mov eax,100
call randomrange
call WriteDec
mov al,' '
call Writechar
loop l1

exit
main ENDP
END main
```

The output window shows the execution of the program, displaying the text "HELLO I AM SAAD UR REHMAN" and "COMPLETING MY COAL TASK" on separate lines, followed by a prompt "ENTER YOUR NAME :".

Q7 :



The screenshot shows a Windows assembly IDE with the following assembly code in the editor:

```
chalja.asm x
TITLE My Firsrt Program(chalja.asm)
INCLUDE Irvine32.inc
.data    ;Saad ur REhman(19k-0218)
Value Byte "HELLO I AM SAAD UR REHMAN",0
.code
main PROC
mov eax,yellow+(blue*16)
call setTextColor
mov edx,offset Value
call Writestring
call crlf

exit
main ENDP
END main
```

The output window shows the execution of the program, displaying the text "HELLO I AM SAAD UR REHMAN" on a single line, followed by a prompt "Press any key to continue".