



20F-0292_BCS 4D_COAL LAB ASSIGNMENT 2

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Code: -

```
INCLUDE Irvine32.inc
.data
arr DWORD 9 DUP(?)
arr_len equ ($ - arr) / 4
msg BYTE "Please enter 10 elements: ",0
newLine BYTE 0dh,0ah,0
msg2 BYTE "Reversed array is: ",0
space byte " ",0
.code
main PROC
mov eax, yellow + (blue * 16)
call SetTextColor
mov esi, OFFSET arr
mov ecx, 10
call FillArray
call PrintArray
call WaitMsg
exit
main ENDP

FillArray PROC uses esi ecx
    mov edx, OFFSET msg
    call WriteString
    call crlf
myLoop1:
    call ReadInt
    mov [esi], eax
    add esi, TYPE DWORD
    loop myLoop1
    ret
FillArray ENDP

PrintArray PROC
    mov edx, OFFSET msg2
    call WriteString

    mov edi, arr_len
myLoop1:
    mov eax, [esi + edi * 4]
    call WriteDec

    sub edi, 1
    mov edx, OFFSET space
    call WriteString
    loop myLoop1
    call crlf
    call crlf
    ret
PrintArray ENDP

EndLine PROC
    mov edx, OFFSET newLine
    call WriteString
    ret
EndLine ENDP
END main
```

Outputs: -

```
Microsoft Visual Studio Debug Console
Please enter 10 elements:
1
2
3
4
5
6
7
8
9
10
Reversed array is: 10 9 8 7 6 5 4 3 2 1

Press any key to continue...
C:\Users\saadg\source\repos\Assembly_Project5\Debug\Assembly
To automatically close the console when debugging stops, ena
Press any key to close this window . . .
```

```
Microsoft Visual Studio Debug Console
Please enter 10 elements:
4
3
5
2
4
1
8
9
0
7
Reversed array is: 7 0 9 8 1 4 2 5 3 4

Press any key to continue...
C:\Users\saadg\source\repos\Assembly_Project5\Debug\Assembly_Project5.exe (proc
To automatically close the console when debugging stops, enable Tools->Options-
Press any key to close this window . . .
```

```
Microsoft Visual Studio Debug Console
Please enter 10 elements:
5
4
6
3
2
5
12
43
76
98
Reversed array is: 98 76 43 12 5 2 3 6 4 5

Press any key to continue...
C:\Users\saadg\source\repos\Assembly_Project5\Debug\Assembly_Projec
To automatically close the console when debugging stops, enable Too
Press any key to close this window . . .
```