

Lab 4- Exercise Assignment # 4

Question 01:

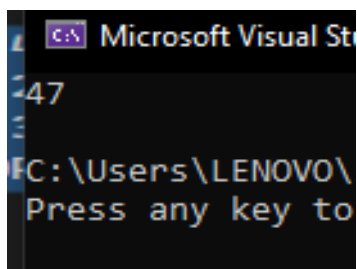
1. The following program displays the largest of three variables. The variables are double-digit variables. The three variables num1, num2 and num3 have values 47, 22 and 31.

Code:

```
INCLUDE Irvine32.inc
```

```
.data
    num1 DWORD 47
    num2 DWORD 22
    num3 DWORD 31
    largest DWORD ?
.code
main PROC
    mov eax, num1
    mov ebx, num2
    cmp eax, ebx
    jge check_num3
    mov eax, ebx
check_num3:
    mov ecx, num3
    cmp eax, ecx
    jge display_result
    mov eax, ecx
display_result:
    mov largest, eax
    mov edx, largest
    call WriteDec
    call CrLf
    exit
main ENDP
END main
```

Output:



Lab 4- Exercise Assignment # 4

Question 02:

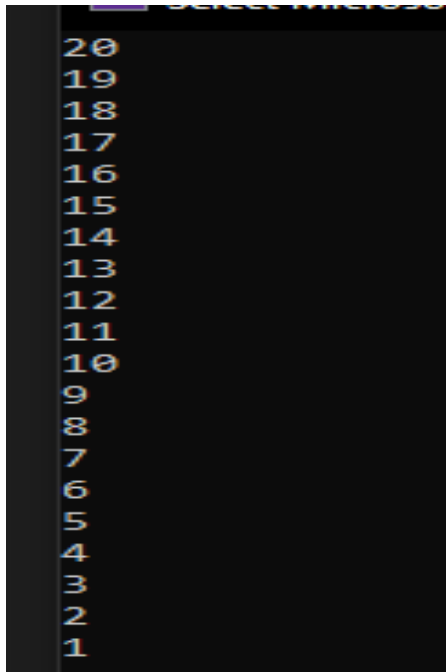
Write a program in assembly language to print the reverse counting from 20 to 1.

Code:

```
INCLUDE Irvine32.inc
.data
.code
main proc
mov eax,20
label1:
mov edx, eax
call writedec
call crlf
dec eax
cmp eax,0
jg label1
exit
main endp
end main
```

Output:

Lab 4- Exercise Assignment # 4



Question 03:

Write a program in assembly language to print the counting from 1 to 5 but 3 is not print in the counting.

Code:

```
INCLUDE Irvine32.inc
```

```
.data
```

```
.code
```

```
main PROC
```

```
    mov eax, 1
```

```
counting:
```

```
    cmp eax, 3
```

```
    je skip_three
```

```
    mov edx, eax
```

```
    call WriteDec
```

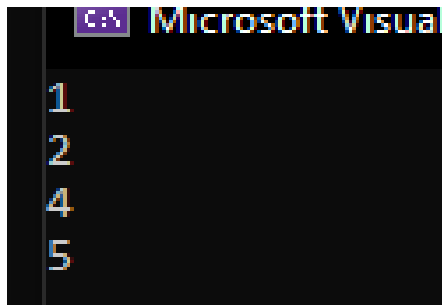
```
    call CrLf
```

Lab 4- Exercise Assignment # 4

```
skip_three:
    inc eax
    cmp eax, 6
    jl counting

    exit
main ENDP
END main
```

Output:



```
C:\> Microsoft Visual Studio
1
2
4
5
```