LAB 5

EXERCISE QUESTIONS

TASK 1:

Implement The following HLL code into Assembly language:

```
#include<iostream>

Using namespace std;

Void  main()

{

For(inti=0;i<=10;++i)

{

Cout<<I;

Cout<<’ ‘;

}
```

The code : (also did in lab)

```
.data

I SDWORD ?

.code

Main PROC

MOV I,1

Again:

Cmp I,10

Jg done

Mov eax,I

Call writeint
```

```
Mov al,’ ‘

Call writechar

Inc  I

Jmp again

done:

Call crlf

Call waitmsg

Exit

Main ENDP

END main
```

Task2:

Print the signed integers starting from 0 to +8.

CODE:

Make few changes in above code (also did in class)

TASK 3

Write the Assembly code for the given do while loop written in a HLL:

```
#include<iostream>

Using namespace std;

Void  main()

{

INT I=0;

While(i<=8)

{

Cout<<(1<<i)
```

```
Cout<<’ ‘;

++I;

}

Cout<<endl;

System(“PAUSE”);

}
```

CODE:

```
.data

I SDWORD ?

.code

Main PROC

MOV I,0

Again:

Cmp I,8

Jg done

Mov eax,I


Call writeint

Mov al,’ ‘

Call writechar

Inc  I

Jmp again

done:

Call crlf

Call waitmsg
```

Exit

Main ENDP

END main

This code print values from 0 to 8 as asked in task 2. To implement complete do while loop as asked in Task 3 , modify this code as:

CODE:

```
.data

I SDWORD ?

.code

Main PROC

MOV I,0

Again:

Cmp I,8

Jg done

Mov eax,1

Mov cl, BYTE PTR

Shl eax,cl

Call writeint

Mov al,’ ‘

Call writechar

Inc I

Jmp again

done:

Call crlf

Call waitmsg

Exit
```

Main ENDP

END main

OUTPUT:

+1 +2   +4 +8 +16 +32 ….+256

TASK 4:

Print a string of your choice five times using loop**.**

CODE:

.data

Mystring byte “hello”,0

.code

Main proc

Mov edx, offset mystring

mov ecx, 5

l1:

call writestring

call crlf

loop l1

call waitmsg

exit

main ENDP

END main

TASK 5:

Print pattern generation:

@ @ @ @ @

@ @ @ @

@ @ @

@ @

@

CODE:

Done in lab