CSC3320 System Level Programming
Lab Assignment 6 - Part 2 - Post Lab

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Lab : 6 (Post Lab)

Part – A

1) Attach a screenshot of the output in step 4.

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./foo.sh
x=14
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

2) Describe what does the shell script foo.sh do?

The shell script foo.sh first initializes variable x to 0 and I to 1. Then, a while loop is used which checks the condition if value of i is less than or equal to 3 or not. If i is less than or equal to 3, then it assigns the product of i into i to s (s = i*i), then the sum of value of s and value of x is assigned to x, and i is incremented to i+1 in the next statement. The loop is performed till the condition of i less than or equal to 3 fails. Then the loop is exited, and the value of x is printed as x equal to value of x.
The loop executes 3 times with
i = 1, s = 1, x = 1 ;
i = 2, s = 4, x = 5 ;
i = 3, s = 9, x = 14.
Then the loop stops executing as i can't be greater than 3 and so the final value of x = 14 is printed to output.

Part – B

Attach a screenshot of the output.

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./foo.sh 5
x=55
```

Part – C

Attach a screenshot of the output.

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./foo.sh
please input a number
5
x=55
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

Part – D

Then put the source code of foo.java in your answer sheet.

```
public class foo{

   public static void main(String args[]){
     int x=0,i=1,s=0;

     while(i<=3){
       s = i*i;
       x = s+x;
       i=i+1;
     }
    System.out.println(x);
   }
}
```

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ vi foo.java
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ javac foo.java
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ java foo
14
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

Part – E

1) Attach a screenshot of the output.

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ vi hello.c
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ cc hello.c
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./a.out
Hello,world
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

2) Try following command to compile and link hello.c again. And tell what new file is generated after this command?
$cc -o hello hello.c

After executing this command, a new file named hello is generated.

3) Try command below and attach a screenshot of the output.
$./hello

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./hello
Hello,world
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

4) Now write a new C program named as myName.c based on hello.c. In this program, print out your first name and last name instead of “Hello,world”. For example, the output could be “My name is Yuan Long”. Execute your myName.c and attach a screenshot of the output. Then write the source code of myName.c in your answer sheet and upload your file myName.c to classroom.

```
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ vi myName.c
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ cc myName.c
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$ ./a.out
My name is Venkata Mani Mohana Rishitha Srikakulapu
[vsrikakulapu1@gsuad.gsu.edu@snowball ~]$
```

```
#include <stdio.h>

int main(void)
{
printf("My name is Venkata Mani Mohana Rishitha Srikakulapu\n");
return 0;
}
```