# Robert Tognoni CSC3320 System Level Programming Lab Assignment 6 - Part 2 - Post Lab

#### **Questions:**

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

```
© ntognoni1@gsuad.gsu.edu@snowball ~]$ vi foo.sh
[rtognoni1@gsuad.gsu.edu@snowball ~]$ [rtognoni1@gsuad.gsu.edu@snowball ~]$ ./foo.sh
x=14
[rtognoni1@gsuad.gsu.edu@snowball ~]$
```

See google classroom attachment labeled Q1

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

foo.sh sets x to 0 and i to 1 initially. A while loop with the condition of i  $\leq$  3 will run and increment i. It also sets a variable s to i^2 and x is updated to s + x. The final result is x = 14 which is printed to output in the format "x={value of x}"

#### Part B:

#### **Question:**

```
    | Trognoni1@gsuad.gsu.edu@snowball~
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$ vi foo.sh
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$ [rtognoni1@gsuad.gsu.edu@snowball ~]$ ./foo.sh
    | x=14
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$ vi foo.sh
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$ [rtognoni1@gsuad.gsu.edu@snowball ~]$ ./foo.sh 5
    | x=55
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$
    | [rtognoni1@gsuad.gsu.edu@snowball ~]$
```

See attached screenshot labeled QB3.

### Part C:

#### **Question:**

```
© ntognoni1@gsuad.gsu.edu@snowball ~]$ ./foo.sh
please input a number
11
x=506
[rtognoni1@gsuad.gsu.edu@snowball ~]$
```

See attached screenshot labeled QC4.

#### Part D:

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

```
© rtognoni1@gsuad.gsu.edu@snowball ~]$ javac foo.java
[rtognoni1@gsuad.gsu.edu@snowball ~]$ java foo
please input a number
19
x=2470
[rtognoni1@gsuad.gsu.edu@snowball ~]$
[rtognoni1@gsuad.gsu.edu@snowball ~]$
```

```
import java.util.Scanner;
class foo {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        int x = 0;
        int i = 1;
        System.out.println("please input a number ");
```

```
int num = Integer.parseInt(scan.nextLine());
    while (i <= num) {
        int s = i*i;
        x = s + x;
        i++;
    }
    System.out.println("x=" + x);
}</pre>
```

#### Part E:

#### **Questions:**

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

```
Select rtognoni1@gsuad.gsu.edu@snowball:~
                                                        [rtognoni1@gsuad.gsu.edu@snowball ~]$ vi hello.c
[rtognoni1@gsuad.gsu.edu@snowball ~]$ [rtognoni1@gsuad.gsu.ed
u@snowball \sim]$ cc hello.c
[rtognoni1@gsuad.gsu.edu@snowball ~]$ ls
                              sh files
                                               testFiles
a.out
          foo.java Lab3
          foo.sh
                             simple.sh
                                               txt files
beep.txt
                     Lab4
                             tar archive
csc3320
          hello.c Lab6
foo.class homeworks public tar archive.tar
[rtognoni1@gsuad.gsu.edu@snowball ~]$ ./a.out
Hello,world
[rtognoni1@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

**Answer:** This generates a file labeled "hello" with no file type.

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

## \$./hello

```
[rtognoni1@gsuad.gsu.edu@snowball ~]$ cc -o hello hello.c
[rtognoni1@gsuad.gsu.edu@snowball ~]$ ls
          foo.java homeworks public
                                           tar archive.tar
a.out
                               sh files
          foo.sh
                                           testFiles
                    Lab3
beep.txt
                               simple.sh
                                           txt files
csc3320
          hello
                    Lab4
                              tar archive
foo.class hello.c Lab6
[rtognoni1@gsuad.gsu.edu@snowball ~]$ ./hello
Hello,world
[rtognoni1@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.

```
rtognoni1@gsuad.gsu.edu@snowball:~ - - - X

[rtognoni1@gsuad.gsu.edu@snowball ~]$ gcc -o myName.out myNam ^
e.c

[rtognoni1@gsuad.gsu.edu@snowball ~]$ ./myName.out

My name is Robert Tognoni

[rtognoni1@gsuad.gsu.edu@snowball ~]$
```

```
#include <stdio.h>
int main(void)
{
    printf("My name is Robert Tognoni\n");
    return 0;
```