Lab 06: Fun with Loops

Displaying values with while loop

In this lab assignment, we are going to learn about the construction of the while loop into more detail. To begin, we can control the execution of the loop by using the following two variables count_loop and end_loop. The loop construction would be the following:

count_loop = 0; // this is the first value of the count_loop

```
while(count_loop<end_loop) // end_loop should have an assigned value
{
    count_loop ++;
}
```

In the above loop, if the value of end_loop variable is 5 then the loop will execute 5 times. If the value of the end_loop variable is 10 then the loop will execute 10 times and so forth. Hence, we should remember this basic loop construction so that we can use it in C++ programs to solve problems.

By using different construction of loops, try to print the following value series. Please write separate programs for each value series.

```
1. Use a loop to display
      1  4  7  ...  1015

2. Use a loop to display
      2  4  6  8  ...  1000

3. Use a loop to display the following
    Series:  1  2  3  4  ...  400
    Sum of the series:    80200
    Average of the series: 200.5
```

When you are satisfied with your programs, by the due date of 5pm Saturday, 29 February, please submit your solutions on the Blackboard website.