WIX1002 Fundamentals of Programming
Tutorial 4 Flow of Control (Repetition)

1. Write statements for each of the following
   a. Find the largest integer n so that n^3 is less than 2000.
   b. Display the square number of the first twelve integers starting from 1.
   c. Display a 4-by-5 matrix using random number within 0 to 100.
   d. Compute the sum of numbers from 1 to a given number.
   e. Compute the sum of the series: 1/25+2/24+3/23 … + 25/1 in two decimal places.

2. Correct the error for the following statements.
   a.
```
for (x = 10; x > 0; x++)
   sum += x;
```
   b.
```
do
   x += 2;
   y += x;
   System.out.println(x + " and " + y);
while (x < 100);
```
   c.
```
for ( x=1, y=20; x < y; x++, y-=2)
  System.out.println(x & " " & y);
```
   d.
```
int i =1;
   while(i<10) {
     if (i==10)
        System.out.println("Program End");
   }
```

3. Write the statements that display the first ten values of the Fibonacci sequence. Given the formula $f_1 = 1$, $f_2 = 1$, $f_n = f_{n-1} + f_{n-2}$.

4. Write the statements that display the string in reverse order. (use String.length() to get the length of the string)

```
        System.out.print(f[i] + " ");
    }

    int f1 = 1, f2 = 1;
    int f = 0;
    f =
```