JC1001 Practical / Lab 4 – Iterative statements

In this practical you will write some simple programs using iterative statements.

1) Write a program that asks the user for 20 numbers. Once all the numbers have been entered, the sum of all the numbers should be displayed.

2) The 1p Saving Challenge is a year-long challenge you can start on the 1st of January 2022. It involves saving a little money every day, starting with 1p. The next day you save 2p, the day after 3p. Write a program that tells the user how much money they end up with at the end of the year.

3) Write a program that displays all the numbers, multiples of 3 up to 300 using range with 3 parameters.

4) Below you have the algorithm of a program that asks the user for a set of positive numbers and identifies the highest among them. The user enters the number 0 to finish the sequence. Implement the algorithm below and test it.

```
Set number with number entered by user
Set highest  with number
while number is not 0
      if number is greater than highest
           Set highest with number

      Set number with number entered by user
print highest
```

5) A weather station records the average temperature every day for 7 days. Write a program that allows the user to input the temperature each day for 7 days and then displays the average temperature for that week.

6) Running on a treadmill at a constant speed burns 9.7 calories per minute. Write a program that uses an iterative statement to display the number of calories burned after 10, 15, 20, 25 and 30 minutes.