Exercise – Pseudocode

Exercises:

1. Write down in your own words what the following algorithms are supposed to do and what their output will be.

```
BEGIN function
      PRINT "Enter the first number"
      INPUT num1
      PRINT "Enter the second number"
      INPUT num2
      num3 = num1 + num2
      num4 = num3/2
      PRINT num4
END function
```

```
BEGIN NestedWhile
      SET counter1 to 1
      SET num to 1
      WHILE counter1 is less or equal to 5
            WHILE num is less than counter1
                  PRINT num
                  INCREMENT num
            ENDWHILE
      INCREMENT counter1
      ENDWHILE
END NestedWhile
```

```
READ current
SET sum to current
SET superIncreasing to true
WHILE there is more input data
      READ current
      IF current <= sum
            SET superIncreasing to false
      ELSE
            SET sum to sum + current
      ENDIF
ENDWHILE
IF superIncreasing is true
      PRINT 'Input forms a super increasing sequence.'
ELSE
      PRINT 'Input is not super increasing.'
ENDIF

(input data: 1 2 4 8 16 22 40)
```

2. Write pseudocode to print all multiples of 5 between 1 and 100.

3. Write pseudo code that reads in three numbers and writes them all in sorted order

4. Convert all the above pseudocode into C++ and make sure your files are appropriately commented.