

**Fundamentals of Programming 1**  
**Exercise sheet 5 – 5%**  
**NOTE: This is a take home assessment.**

**Question 1**

Write a program to read an integer value in the range 1..100 and output its value in words. For example, if the input is **45** then the output is “**forty five**”. If the number entered is not within the valid range the program should print “Invalid number!”. Use the test cases shown below in your screen shots. Name your program **Question1.java**

```
Please enter a number between 1 - 100: 1
One
Please enter a number between 1 - 100: 12
Twelve
Please enter a number between 1 - 100: 21
Twenty One
Please enter a number between 1 - 100: 100
One Hundred
```

**Question 2**

Write a program that reads the length of any three lines a, b, c and prints one of:

- A) Triangle; followed by either scalene, isosceles or equilateral; followed by either right angled or not right angled,
- B) Not a triangle.

Use the test cases below in your screenshots. Name your program **Question1.java**

```
Enter length of line A : 3
Enter length of line B : 2
Enter length of line C : 5
Not a triangle.
Enter length of line A : 3
Enter length of line B : 3
Enter length of line C : 3
Triangle, equilateral.
Enter length of line A : 3
Enter length of line B : 4
Enter length of line C : 5
Triangle, scalene, right angled.
Enter length of line A : 8
Enter length of line B : 8
Enter length of line C : 6
Triangle, isosceles, not right angled.
```

**Deliverables**

Place all your files in a folder called **Week5**. Zip the Week5 folder and upload the zip file using the Week5 upload link for your group on MOODLE. **DEADLINE: Thursday 2<sup>nd</sup> of November at 21:00hrs.**

**Plagiarism**

This assessment should be an individual piece of work. Any evidence of plagiarism will result in a grade of zero for all parties involved and will trigger the Universities plagiarism policy 3AS08 (see course coordination page).