OOD Lab 1 – Classes/Objects

- Put your name and student number in a comment at the top of each file.
- Ensure that your code is well formatted e.g. lines after an opening brace should be indented. Each closing brace should be at the same indentation as the statement which opened it. (Use Ctrl + Shift + F if using Eclipse)
- It is compulsory to comment your code appropriately. For each of the exercises ensure that your code is sufficiently commented to demonstrate your understanding of the software you are writing. You do not have to comment every line however.
- Marks will be lost if the above instructions are not followed.
- You may discuss assignments with you classmates but you must write each assignment yourself. Copying another student's code will be considered plagiarism. Outcomes vary from receiving zero in assessments to failing the course.

1. In a file named Student.java, write a class called Student with first name, last name, gender, and age attributes.

   a. Give the class a three-argument and a four-argument constructor. The three-argument constructor should take the Student's first name, gender and age as parameters and set the last name to be an empty String.

   b. The four-argument constructor should take the Students first name, last name, gender and age as parameters.

   c. Give the class a method that returns the age group of a student:

      i. Child: if a student is younger than 12

      ii. Teenager: if a student is aged between 13 and 19

      iii. Young Adult: if a student is aged between 20 and 25

      iv. Adult: if a student is older than 25

   d. Give the class a method called display which displays the Student's attributes along with the age group that the Student is in.

   e. In a separate file named Lab1.java create one Student object for each age group and invoke the display method for each object. Ensure that both constructors are used at least once.

What do I submit?

Submit the files on Moodle. Only submit the two .java files. Do not submit the whole package.