Objectives:

- Write and compile simple Java programs that uses calculations, input data from the keyboard. The softcopy of the labsheet has clickable hyperlinks.

Exercise 1 (Time: 10 minutes) **Compulsory**

a) Declare two integer variables, `miles` and `yards`, and one double variable for `kilometers`

b) Initialize the variables to hold the number of `miles` and `yards` in a marathon respectively (miles to 26 and yards to 385).

c) Write an expression to calculate `kilometers` from miles and yards.

d) Save the result of the expression in the variable kilometers.

Note: *One mile is 1.609 kilometers. There are 1760.0 yards in a mile*

Exercise 2 (Time: 5 minutes) **Compulsory**

Write a Java program that take Student's First Name, Student ID and District he/she comes from as command line arguments and display the user inputs.

e.g.
z:\>`java Exercise2 Anoja IT14129011 Kalutara`
Output :
```
DitNo : IT14129011
Name : Anoja
District : Kalutara
```

Note : *The variable array (args) in the main function captures the command line arguments given in the program. i.e. args in* `public static void main(String args[])`

Exercise 3 (Time: 5 minutes)

Write a program to calculate the volume of a cube when `length`, `width` and `height` are given as keyboard inputs.

Note: *You can use **Scanner** class in the **java.util** package.*

Exercise 4 (Time: 10 minutes)   **Compulsory**

There are two other ways you can input data in Java. Retry Exercise 3 using another technique to input data from the Keyboard.

Note: *You can use `System.in`, `InputStreamReader` class and `BufferedReader` class. `InputStreamReader` and `BufferedReader` classes are in java.io package. (Note Existing Java Classes are in Capitals).   Please have a look at https://goo.gl/93wQmg*

Exercise 5 (Time: 15 minutes)   **Compulsory**

a) Create a class called `EvenOddNumber`.
b) It has a method called `findEvenOrOdd(int i)` to find whether a number is even or odd.
c) This method takes an integer argument and returns a boolean (hyperlink) value. *(Note : There is a data type called **boolean** in java which can store true/false values)*
d) Then create another class Demo with the main method and create an object from `EvenOddNumber` class.
e) Through the object creates call the `findEvenOrOdd()` method and display outputs indicating whether those are even numbers or odd numbers.

Note: *Use **Scanner** class in the **java.util** package and **ternary operator (hyperlink)** for checking. Also have a look at how you can create two classes in one program and create objects using this sample https://goo.gl/MjBSV7*

Exercise 6 – Have a look at the Assignment and start working on it individually