

# 5COSC023W - Tutorial 3 Exercises

As part of this tutorial for this week, you should complete **ALL** the tasks described in the following specifications: (**make sure that you ask questions to your tutor for anything that you do not understand or if you are stuck at any point**):

## 1 The Lottery Program

Implement the Lottery Android app developed in the lecture. **Make sure that you type the code and NOT simply copy and paste. Make sure that you understand the full code.**

As a reminder the following was implemented in the lecture:

A lottery ticket consists of 6 unique numbers in the range between 1 and 59.

Write an Android application which calculates such a 6 lucky random unique numbers which the program user can play in the next lottery. Every time a button is pressed a new set of unique numbers is generated.

## 2 Extending the Lottery Program

For ALL the tasks you should use **Views**.

1. Extend your Lottery application so that it uses 6 separate **TextView** widgets to display the 6 generated numbers. The 6 textviews should have some horizontal space between them.
2. Extend your Lottery application so that it contains a textbox. The user will type a number in the textbox and the program will exclude the number from the generated results.

**Hint:** Use a **EditText** view (widget) for the textbox.

3. Extend your Lottery program so that it contains 6 additional buttons. Once the 6 random numbers are generated by the previously implemented button, the user can use one of the 6 buttons to change one of the generated numbers.

For example, pressing the 3rd button will replace the third number with a newly generated unique number while the rest of the numbers remain the same (i.e. the first, second, fourth, fifth and sixth number do not change). The newly generated number should be unique (i.e. not the same with the rest unchanged numbers).