Practical 4: Sample Questions

**Question 1**

Create an app that asks the user to enter the following:

* A 1st number
* A 2nd number
* An action from a list picker that has three options:
  + Multiply
  + Add
  + Sutract

Once done, the app should display the appropriate result e.g.

10 + 12 = 22 or

10 – 2 = -2 or

10 \* 12 = 120

**Question 2**

Create an app that asks the user to enter a number. Then the app generates 10 random numbers between 1 and the users entered number and outputs them as follows (assume user enters 230 in this case):

10,211,78,89,207,34,56,66,145,168

**Question 3**

Create an app that performs encryption and decryption. The user must enter a 4 letter word that contains the letters from the first 9 letters of the alphabet. (A to I) e.g. BACH.

To encrypt BACH, the following steps occur:

* Each letter is converted to a number e.g. 2138
* The number is reversed e.g. 8312
* This number is squared e.g. 69089344
* Replace each number with a letter e.g. FIZGICDD

To decrypt FIZGICDD, the following steps occur:

* Replace each letter with a number e.g. 69089344
* Get the square root of this number e.g. 8312
* Replace each number with a letter e.g. BACH