Assignment 3

1. How to duplicate repeating items inside a Dart list?

   Problem

   Consider the code:

   final List<Ball> _ballList = [Ball (), Ball (), Ball (), Ball (), Ball (),]

   What can to be done in order to not repeat Ball () multiple times?

2. How to get difference of lists in Flutter/Dart?

   Problem

   Consider you have two lists [1,2,3,4,5,6,7] and [3,5,6,7,9,10]. How would you get the difference as output? eg. [1, 2, 4

3. Let's say you are given a list saved in a variable:

   Consider a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100].

   Write a code that takes this list and makes a new list that has only the even elements of this list in it.

4. Ask the user for a number and determine whether the number is prime or not.s

5. Write a program to print multiplication table of 7 length 15.

6. Write a program to print items of the following array using for loop: fruits = ["apple", "banana", "mango", "orange" , "strawberry"].

7. Write a program to print multiples of 5 ranging 1 to 100.

8. The Temperature Converter: It's hot out! Let's make a converter based on the steps here.

   a. Store a Celsius temperature into a variable.

   b. Convert it to Fahrenheit & output "NNoC is NNoF".

   c. Now store a Fahrenheit temperature into a variable.

   d. Convert it to Celsius & output "NNoF is NNoC".

Assignment 3

9. Write a program to create a calculator for +, -, *, / & % using if statements. Take the following input:
   a. First number Second number
   b. Operation (+, -, *, /, %)

   Compute & show the calculated result to user.

10. Write a program that takes a character (I. e. string of length 1) and returns true if it is a vowel, false otherwise.