## Assignment 4

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

## **Problem**

Consider the code:

final List<Dynamic> \_nameList = [Bilal, Bilal, Bilal, Owais, Owais, Owais]

What can to be done in order to not repeat Bilal and Owais multiple times?

2. 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.

- 3. Ask the user for a number and determine whether the number is prime or not.
- 4. Write a program to print multiplication table of 7 length 15 using loop.
- 5. Write a program to print items of the following array using for loop: fruits = ["apple", "banana", "mango", "orange", "strawberry"].
- 6. Write a program to print multiples of 5 ranging 1 to 100.
- 7. 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".
- 8. Write a program to create a calculator for +, -, \*, / & % using if statements. Take the following input:
  - a. First number Second number
  - b. Operation (+, -, \*, /, %)

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Compute & show the calculated result to user.

- 9. Write a program that takes a character (I. e. string of length 1) and returns true if it is a vowel, false otherwise.
- 10. Write a program to reverse a string. For example, if my string is "natsikaP nawaJ" then my result will be "Jawan Pakistan".
- 11. How are duplicates removed from a given array? [Ahmed, Bilal, Muhammad, Owais, Muhmmad, Ali, Ahmed]
- 12. Find the missing number in array of 1 to 100?
- 13. Find the largest and smallest number in an unsorted integer array?
- 14. Find all pairs of an integer array whose sum is equal to a given number?

