## **Dart Advanced Tasks**

For the Dart Advanced, solve the following problems in any order, each problem and game should be solved using OOP in Dart:

- Problem 0: Make a class that inherit from 2 classes in two different ways
- Problem 1:
  - Make an abstract class called geoshape that has one variable called dim1 and an abstract function called get area
  - Make a class called circle that inherit from geoshape to calculate the area of the circle
    - Area =  $3.14 \times r \times r$
  - Make another class called triangle that inherit from geoshape too and calculate area
    - Area =  $0.5 \times dim1 \times dim2$
  - Get the total area:
    Total area= area of the circle + area of the triangle
- Game: Tic-Tac-Toe

Create a simple Tic-Tac-Toe game. You can find a description for an example of Tic-Tac-Toe game here:

https://www.c-sharpcorner.com/UploadFile/75a48f/tic-tac-toe-game-in-C-Sharp/

Hangman

Create a simple Hangman game. You can find a description for an example of Hangman game here:

https://www.codeproject.com/Articles/61917/Hangman-Game