

## Area and Perimeter of 2D Shapes

- Create an interface with two functions; area and perimeter
- Define a class circle which implements the interface in order to calculate the area and perimeter specific to the circle class
  - Declare radius variable
  - Ask user for input
  - Write the area and perimeter function that returns values of area and perimeter
- Define a class Octagon which implements the interface in order to calculate the area and perimeter specific to the Octagon class
  - Declare side variable
  - Ask user for input
  - Write the area and perimeter function that returns values of area and perimeter
- Define a class Parallelogram which implements the interface in order to calculate the area and perimeter specific to the Parallelogram class
  - Declare base and Height variable
  - Ask for user input
  - Write the area and perimeter function that returns values of area and perimeter
- Define a class Rectangle which implements the interface in order to calculate the area and perimeter specific to the Rectangle class
  - Declare width, height variable
  - Ask user for input
  - Write the area and perimeter function that returns values of area and perimeter
- Define a class Triangle which implements the interface in order to calculate the area and perimeter specific to the Triangle class
  - Declare a, b, c, ht variable which represents sides of triangle and height
  - Ask user for input
  - Write the area and perimeter function that returns values of area and perimeter
- Define a main class
  - Define a method printInfo to print the results of area and perimeter depending on object of the class (eg. circle class).
  - Ask the user to choose a shape
  - Based on the user input chosen shape, ask further inputs from user required to calculate area and perimeter (eg. if user selects circle, the user will have to input radius). So use the switch case statement to ask user based on chosen shape
  - Define a method printInfo to print the result into format