ASSGN2

Assignment

1 - I want to calculate the "Perimeter" and 'Area' of different shapes (Square, Circle....)

How can I use abstraction to implement it?

Try to use do this exercise with and without abstraction and explain the reason we use abstraction

hint :having abstraction:

```
public abstract class Shape {

    abstract double getArea(double length);

    abstract double getPerimeter(double length);

}
```

2-

Create an abstract class 'Animals' with 1 abstract method "Sound". Now create a class 'Cats' that has its own implementation of "Sound"

And class Dog that has its own implementation of "Sound".

Now create an object for each of the subclasses and call Sound method for them.

3-

We have to calculate the percentage of marks obtained in three subjects (each out of 100) by student A and in four subjects (each out of 100) by student B. Create an abstract class 'Marks' with an abstract method 'getPercentage'. It is inherited by two other classes 'A' and 'B' each having a method with the same name which returns the percentage of the students. The constructor of student A takes the marks in three subjects as its parameters and the marks in four subjects as its parameters for student B. Create an object for each of the two classes and print the percentage of marks for both the students