OPP lab 12

Task 1:

```
package com.mycompany.lab12task1ruqqia;


abstract class vehicle
{
    public abstract void start();
}
class Car extends vehicle
{
   private String model;
Car (String model)
{
    this.model=model;
}
public void start()
{
    System.out.println(model + "Car is starting");
}
}
class Motorcycle extends vehicle
{
    private String brand;
    Motorcycle(String brand)
    {
        this.brand= brand;
    }
    public void start()
    {
```

```
        System.out.println(brand + "Motorcycle is starting");
    }
}
public class Lab12task1Ruqqia {

    public static void main(String[] args) {
        Car c = new Car ("Toyoto");
        Motorcycle m = new Motorcycle("Honda");
        c.start();
        m.start();
    }
}
```

OUTPUT:

ToyotoCar is starting

HondaMotorcycle is starting

Task 2:

```
package com.mycompany.lab12task2ruqqia;


abstract class Seat
{
    public abstract double calculateSeatPrice(int seats);
}
class BusinessClass extends Seat
{
    public double calculateSeatPrice(int  numberofSeats) throws IllegalArgumentException
    {
       double pricePerSeat = 10000;
       return seats * pricePerSeat;
```

```
    }
}
class FirstClass extends Seat
{
    public double calculateSeatPrice(int numberofSeats)throws IllegalArgumentException
    {
        double pricePerSeat = 20000;
        return seats * pricePerSeat;
    }
}
class EconomyClass extends Seat
{
    public double calculateSeatPrice(int  numberofSeats)throws IllegalArgumentException
    {
        double pricePerSeat = 30000;
        return seats * pricePerSeat;
    }
}
public class Lab12task2ruqqia {
    public static void main(String[] args) {
    Seat business = new BusinessClass();
    Seat first = new BusinessClass();
    Seat economy = new BusinessClass();

    System.out.println("Business Class Price "+ business.calculateSeatPrice(3));
    System.out.println("First Class Price "+ first.calculateSeatPrice(2));
    System.out.println("Economy Class Price "+ economy.calculateSeatPrice(4));
    }
}
```

Output:

Business Class Price 30000.0

First Class Price 20000.0

Economy Class Price 40000.0