

```
package Task1;

import javax.swing.*;

public class Car {

    private String make;
    private String model;
    private int year;
    private String bodyStyle;
    private Driver driver;

    public Car( String make, String model, int year ,String bodyStyle) {

        this.make = make;
        this.model = model;
        this.year = year;
        this.bodyStyle = bodyStyle;
    }

    public String getMake() { return make; }

    @Override
    public String toString() {
        return "Car{" +
            "make='" + make + '\'' +
            ", model='" + model + '\'' +
            ", year=" + year +
            ", bodyStyle='" + bodyStyle + '\'' +
            ", driver=" + driver +
            '}';
    }
}
```

```
import java.util.*;

public class main {
    public static void main(String[] args) {
        Room room1=new Room(1,1);
        Room room2=new Room(3,1);
        Room room3=new Room(4,1);

        ArrayList<Room> rooms=new ArrayList<Room>();
        rooms = new arraylist<Room> ();
        rooms.add(room1);
        rooms.add(room2);
        rooms.add(room3);

        Building building =new Building(rooms, 1,1,false);
        System.out.println(rooms.getNumberOfLamps());
    }

    public String getWalls() {
        return room1.getWalls();
    }

    public void setWalls(String walls) {
        room1.setWalls(walls);
    }
}
```

@Override

```
public String toString() {  
    return "Car{" +  
        "make='" + make + '\'' +  
        ", model='" + model + '\'' +  
        ", year=" + year +  
        ", bodyStyle='" + bodyStyle + '\'' +  
        ", driver=" + driver +  
        '}';  
}
```

```
public void setMake(String model) { this.make = make; }
```

```
public int getYear() { return year; }
```

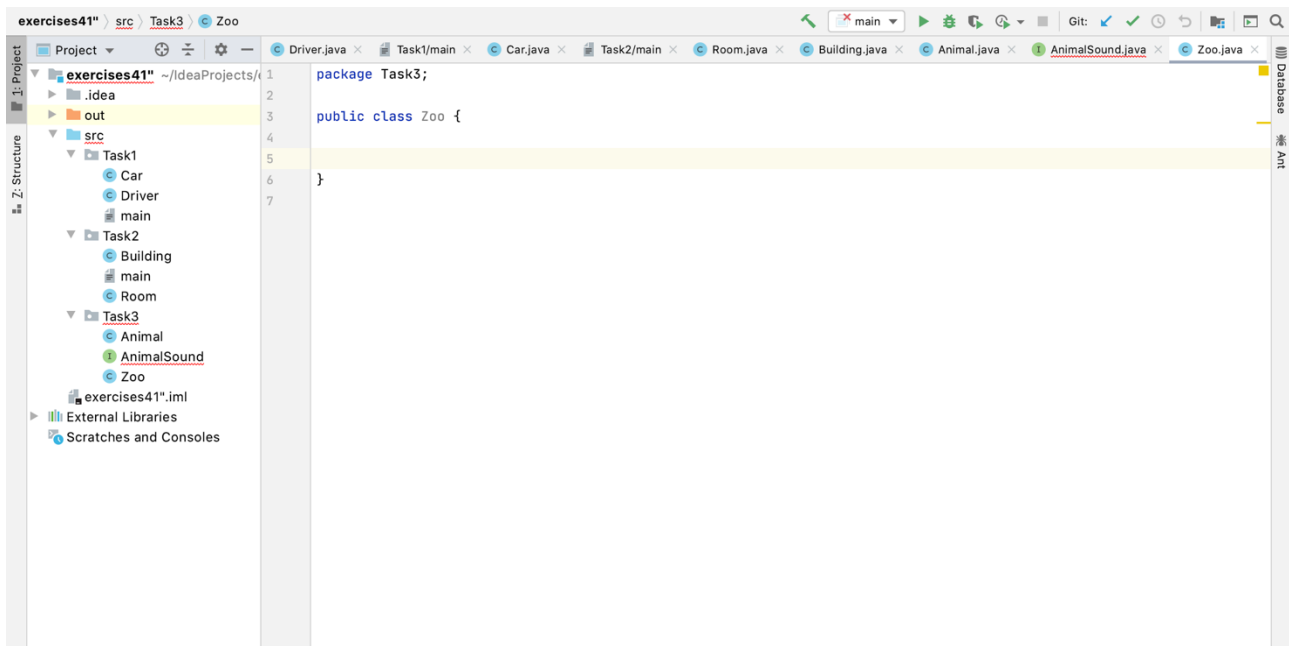
```
public void setYear(int year) { this.year = year; }
```

```
public String getModel() { return model; }
```

```
public void setDriver(Driver driver) { this.driver = driver; }
```

```
public Driver getDriver() { return driver; }
```

```
}
```



```
package Task3;
```

```
public interface AnimalSound {  
    void makeSound();
```

```
    default public int legs() { return 0; }
```

```
    public default boolean makeSound() {  
        return false;  
    }
```

```
}
```

```
package Task3;
```

```
public class Animal {
```

```
//give it a private field called numberOfLegs using an appropriate data type
```

```
    private int numberOfLegs;
```

```
//add a constructor, that sets the above field.
```

```
    public Animal(int numberOfLegs) {
```

```
        this.numberOfLegs = numberOfLegs;
```

```
    }
```

```
//add a getter for the numberOfLegs field.
```

```
    public int getNumberOfLegs() {
```

```
        return numberOfLegs;
```

```
    }
```

```
}
```

```
package Task2;
```

```
//create Building java class
```

```
public class Building {
```

```
     final Room room;
```

```
    protected int numberOfBathrooms;
```

```
    protected int numberOfFloors;
```

```
    protected String isOfficeBuilding;
```

```
    public Room getRoom() {
```

```
        final Room room = this.room;
```

```
        return room;
```

```
    }
```

```
    public int getNumberOfFloors() { return numberOfFloors; }
```

```
    public Building(Room room) { this.room = room; }
```

```
    public String getIsOfficeBuilding() { return isOfficeBuilding; }
```

```
}
```

```
        this.walls = walls;
        this.numberOfDoors = numberOfDoors;
        this.numberOfLamps = numberOfLamps;
        this.numberOfWindow = numberOfWindow;
    }

    public String getWalls() { return walls; }

    public void setWalls(String walls) { this.walls = walls; }

    public int getNumberOfDoors() { return numberOfDoors; }

    public void setNumberOfDoors(int numberOfDoors) { this.numberOfDoors = numberOfDoors; }

    public int getNumberOfLamps() { return numberOfLamps; }

    public void setNumberOfLamps(int numberOfLamps) { this.numberOfLamps = numberOfLamps; }

    public int getNumberOfWindow() { return numberOfWindow; }

    public void setNumberOfWindow(int numberOfWindow) { this.numberOfWindow = numberOfWindow; }
}
```

```
package Task2;
```

```
public class Room {
```

```
    /* 2.a Create a Room.java class with the following fields (use appropriate types):*/
```

```
    private String walls;  
    private int numberOfDoors;  
    private int numberOfLamps;  
    private int numberOfWindow;
```

```
    // The constructor method
```

```
    // The constructor method
```

```
    public Room(String walls, int numberOfDoors, int numberOfLamps, int numberOfWindow) {
```

```
        this.walls = walls;  
        this.numberOfDoors = numberOfDoors;  
        this.numberOfLamps = numberOfLamps;  
        this.numberOfWindow = numberOfWindow;
```

```
    }
```

```
    public String getWalls() { return walls; }
```

```
    public void setWalls(String walls) { this.walls = walls; }
```

```
    public int getNumberOfDoors() { return numberOfDoors; }
```

```
    public void setNumberOfDoors(int numberOfDoors) { this.numberOfDoors = numberOfDoors; }
```



```
package Task1;
```

```
public class main {
```

```
    public static void main(String[] args) {
```

```
        Driver driv;
```

```
            driv = new Driver();
```

```
    }
```

```
}
```

```
package Task1;
```

```
public class Driver {
```

```
    private String name;
```

```
    private int age;
```

```
    @Override
```

```
    public String toString() {
```

```
        return "Driver{" +
```

```
            "name='" + name + '\'' +
```

```
            ", age=" + age +
```

```
            '}';
```

```
    }
```

```
    public Driver() {
```

```
        this.name = name;
```

```
        this.age = age;
```

```
    }
```

```
}
```