

MoonRefrigerators company, a refrigerators manufacturing company Manufactures a large number of refrigerators. A refrigerator possesses certain features and attributes and must behave in a certain manner. The company documents these attributes as a blueprint, which is used to manufacture the refrigerator.

1. What is this blueprint called in an object-oriented programming language?

Identify the class and objects and the various attributes of an object of the Class.

2. The manufacturer does not want that a user should tamper with the Electrical wiring in the refrigerator, and hence must be hidden from the User. Identify the feature of object-oriented programming that best Describes the feature of data or information hiding.

3. A person operation the refrigerator need not know the details of how the Refrigerator works. The person just needs to know how to switch on and Off an oven, and change the temperature settings. Identify the feature OOPS that allows the user to ignore the irrelevant details of working of a Refrigerator and concentrate on the essentials.

4. All refrigerators have certain common attributes and functionality. For Example every refrigerator has a door. Different companies add various Additional features to the basic functionality of a refrigerator. Identify a Sub class of the Refrigerator class. Identify the property OOPS, in which The existing features of a class can be reused by another class and what is Its advantage.

```
import java.util.Scanner;
```

```
class Wiring { //using encapsulation
    private String wiringType;

    public String wiringType() {
        return wiringType;
    }

    public String getWiringType() {
        return wiringType;
    }

    public void setWiringType(String wiringType) {
        this.wiringType = wiringType;
    }
}
```

```
abstract class Mprocess {
    abstract void door();

    abstract void colour();

    abstract void size();

    abstract void temperature();
}
```

```
class Refrigerator extends Mprocess {
    Scanner rf = new Scanner(System.in);

    void door() {
        System.out.println("Available Refrigerators with perticular Door");
    }
}
```

```

        System.out.println("1.Single Door" + "\n" + "2.Double Door" + "\n"
            + "Enter your Door Choice");
        int choice = rf.nextInt();
    }

    void colour() {
        System.out.println("Available Colours");
        System.out.println("1.White" + "\n" + "2.Red" + "\n"
            + "Enter your Colour Choice");
        int colour = rf.nextInt();
    }

    void size() {
        System.out.println("Available Capacities for Refrigerator");
        System.out.println("1.500Liters" + "\n" + "2.250Liters" + "\n"
            + "Enter your Capacity Choice");
        int size = rf.nextInt();
    }

    void temperature() {
        System.out.println("Temperature");
        System.out.println("1.High" + "\n" + "2.Medium" + "\n" + "3.Low"
            + "\n" + "Enter your Temperature Choice");
        int temp = rf.nextInt();
        System.out.println("You can change the temperature by adjusting temperature button");
    }
}

/*
 * class Oven extends Mprocess{
 *
 * }
 */
public class MoonRefrigator {

    public static void main(String[] args) {
        Scanner mr = new Scanner(System.in);
        System.out.println("Welcome to Moon Refrigerators");
        Mprocess mrf = new Refrigerator();
        Wiring mm = new Wiring();
        mm.setWiringType("Hidden");
        System.out.println(mm.getWiringType());
        mrf.door();
        mrf.colour();
        mrf.size();
        mrf.temperature();
    }
}

```

Problems @ Javadoc Declaration Console

<terminated> MoonRefrigrator [Java Application] C:\Program Files\Java\jdk1.7.0_79\bin

Welcome to Moon Refrigerators

Hidden

Available Refrigerators with perticular Door

1.Single Door

2.Double Door

Enter your Door Choice

1

Available Colours

1.White

2.Red

Enter your Colour Choice

1

Available Capacitys for Refrigerator

1.500Liters

2.250Liters

Enter your Capacity Choice

1

Temperature

1.High

2.Medium

3.Low

Enter your Temperature Choice

2

You can change the temperature by adjusting temperature button