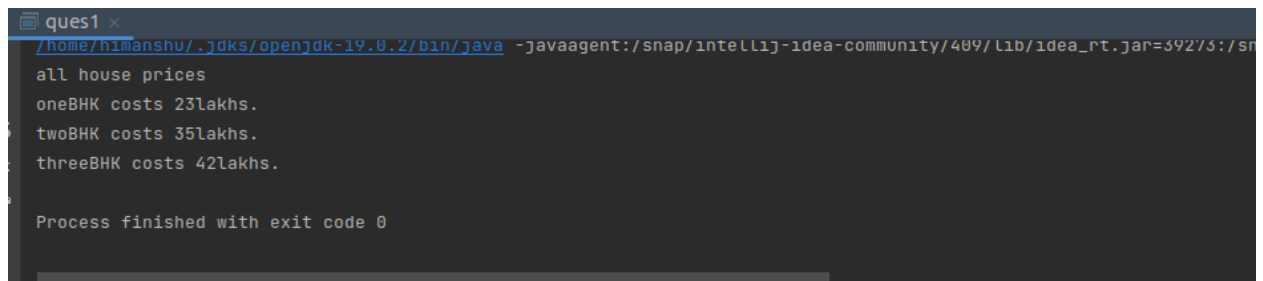


Q.1 ) Write a program to display values of enums using a constructor & getPrice() method (Example display house & their prices).

```
enum House{
    oneBHK(23),
    twoBHK(35),
    threeBHK(42);
    private int price;
    House(int p) { price =p;}
    int getPrice(){return price;}
}

public class ques1 {
    public static void main(String [] args){
        System.out.println("all house prices");
        for(House h: House.values())
            System.out.println(h+" costs "+h.getPrice()+"lakhs.");
    }
}
```

Output:



```
ques1 x
/home/himanshu/.jdk/openjdk-19.0.2/bin/java -javaagent:/snap/intellij-idea-community/409/lib/idea_rt.jar=39273:/sn
all house prices
oneBHK costs 23lakhs.
twoBHK costs 35lakhs.
threeBHK costs 42lakhs.

Process finished with exit code 0
```

2) Create a User class with fields: firstname, lastname, age, phonenumber. Write a program which accepts values of user fields from commandline, create object and **append** that to a text file. After every user creation the program should prompt: "Do you want to continue creating users? (Type QUIT to exit)" and keep on accepting values and writing to file until user quits.

```
public class ques2 {
    String FirstName;
    String LastName;
    String age;
    String PhoneNo;

    public ques2( ) {
```

```

        this.FirstName = " ";
        this.LastName = " ";
        this.age = " ";
        this. PhoneNo = " ";
    }

    @Override
    public String toString() {
        return "User{" +
            "FirstName='" + FirstName + '\'' +
            ", LastName='" + LastName + '\'' +
            ", age='" + age + '\'' +
            ", PhoneNo='" + PhoneNo + '\'' +
            '}';
    }
}

```

```

import java.io.*;
import java.io.FileWriter;
import java.io.BufferedWriter;
import java.util.ArrayList;
import java.util.Scanner;
public class ques2b extends ques2 {
    public static void main(String[] args) throws IOException {
        ArrayList<ques2> Userlist=new ArrayList<>();
        String txt;
        FileWriter file = new FileWriter("/home/himanshu/data.txt");
        BufferedWriter br = new BufferedWriter(file);
        // int i=0;
        Scanner sc = new Scanner(System.in);
        while (true)
        {
            ques2 u= new ques2();
            Userlist.add(u);
            System.out.print("Enter First Name=");
            u.FirstName = sc.next();
            br.append(u.FirstName);
            br.append(" ");
            System.out.println("Enter Last Name=");
            u.LastName = sc.next();
            br.append(u.LastName);
            br.newLine();
            System.out.println("Enter age=");

```

```

        u.age = sc.next();
        br.append( u.age);
        br.newLine();
        System.out.println("enter Phone_No=");
        u.PhoneNo = sc.next();
        br.append(u.PhoneNo);
        br.newLine();
        br.newLine();
        System.out.println("Do you want to continue creating users? (Type
QUIT to exit)");
        txt = sc.next();

        if ("QUIT".equalsIgnoreCase(txt)) {
            break;
        }

    }
    br.close();
}
}

```

Output:

```

/home/himanshu/.jdk/openjdk-19.0.2/bin/java -javaagent:/snap/intellij-idea-community/409/lib/idea_rt.jar=46599:/s
Enter First Name=himanshu
Enter Last Name=
panchal
Enter age=
55
enter Phone_No=
100
Do you want to continue creating users? (Type QUIT to exit)
QUIT
Process finished with exit code 0

```

Q.3) Write a program to count number of occurrences of a word in a file. The file name and word should be supplied through commandline.

```

import java.io.BufferedReader;
import java.io.FileReader;

public class ques3 {
    public static void main(String[] args) throws Exception {

```

```

String line;
int count = 0;

FileReader file = new FileReader( "/home/himanshu/data.txt");
BufferedReader br = new BufferedReader(file);

while ((line = br.readLine()) != null) {
    String words[] = line.split(" ");
    count = count + words.length;
}

System.out.println("Number of words present in given file: " + count);
br.close();
}
}

```

Output:

```

/home/himanshu/.jdk/openjdk-19.0.2/bin/java -javaagent:/snap/intellij-idea-community/409/lib/idea_rt.jar=38599:/sn
Number of words present in given file: 22

Process finished with exit code 0

```

Q.4) Write a program to show application of Factory Design Pattern.

```

//package Java3;

import java.util.Locale;

public class Select_Network_fact
{
    public cellularplan getPlan(String planType) {
        if (planType== null || planType.isEmpty())
            return null;
        switch (planType.toLowerCase()) {
            case "airtel":
                return new airtel_Network();
            case "vodaphone":
                return new Vodaphone();
            default:
                throw new IllegalArgumentException("Unknown channel "+planType);
        }
    }
}

```

```
    }  
}  
}
```

```
abstract public class cellularplan {  
    protected double rate;  
  
    abstract void getRate();  
  
    public void processBill(int minutes){  
        System.out.println(minutes*rate);  
    }  
}
```

```
public class Vodaphone extends cellularplan {  
    public void getRate() {  
        rate=1.75;}  
}
```

```
public class airtel_Network extends cellularplan{  
    public void getRate() {  
        rate=2.55;}  
}
```

Q.5) Write a program to show application of Singleton Design Pattern.

```
public class singleton {  
    public static void main(String[] args) {  
  
        SingleObj object = SingleObj.getInstance();  
    }  
}
```

```
        object.showMessage();
    }
}
public class SingleObj {

    private static SingleObj instance = new SingleObj();

    private SingleObj() {}

    public static SingleObj getInstance() {
        return instance;
    }

    public void showMessage() {
        System.out.println("Singleton Factory");
    }
}
```

Output:

```
/home/himanshu/.jdk/openjdk-19.0.2/bin/java -javaagent:/snap/intellij-idea-community/409/lib/idea_rt.jar=43147:/sn
Singleton Factory

Process finished with exit code 0
```