LAB-4

202203028

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Program 1:

Code:

```java
import java.util.*;

public class code
{
    public static String reverse(String s1){
        String s2="";
        for(int i=s1.length()-1;i>=0;i--){
            s2=s2+s1.charAt(i);
        }
        return s2;
    }
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.next();
        s1=reverse(s1);
        System.out.println(s1);


    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
Dhaval
lavahD
```

Program 2:

Code:

```java
import java.util.*;

public class Main
{

    public static String isPal(String s1){
        s1=s1.toUpperCase();
        for(int i=0;i<s1.length()/2;i++){
            if(s1.charAt(i)==s1.charAt(s1.length()-1-i)){
                continue;
            }else{
                return "NO It is not";
            }
        }
        return "YES It is Palindrome";
    }
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.next();

        System.out.println(isPal(s1));



    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> java code
Malayalam
YES It is Palindrome
PS C:\Users\Admin\Desktop\Ljava>
```

Program 3:

Code:

```java
import java.util.*;

public class code
{

    public static int count(String s1,char ch){
        int n=0;
        for(int i=0;i<s1.length();i++){
            if(s1.charAt(i)==ch){
                n++;
            }
        }
        return n;
    }
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.next();
        char ch=sc.next().charAt(0);

        System.out.println(count(s1,ch));


    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
Dhaval
a
2
PS C:\Users\Admin\Desktop\Ljava>
```

Program 4:

Code:

```java
import java.util.*;

public class code
{


    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.nextLine();
        int n=0;
        String s2="";

        for(int i=0;i<s1.length();i++){
            if(s1.charAt(i)!=' '){
                s2=s2+s1.charAt(i);
            }
        }

        System.out.println(s2);


    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
  Malsattar    Dhaval
MalsattarDhaval
PS C:\Users\Admin\Desktop\Ljava>
```

Program 5:

Code:

```java
import java.util.*;

public class code
{


    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.nextLine();
        int n=0;



        for(char c: s1.toCharArray()){
            n++;
        }

        System.out.println(n);


    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
dkaklwjgfoiklhd
15
PS C:\Users\Admin\Desktop\Ljava>
```

Program 6:

Code:

```java
import java.util.*;

public class code
```

```
{


    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String s1=sc.next();
        char ch=sc.next().charAt(0);
        String s2="";



        for(int i=0;i<s1.length();i++){
            if(ch!=s1.charAt(i)){
                s2=s2+s1.charAt(i);
            }
        }

        System.out.println(s2);


    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
aaa_Dhaval__aaa
a
_Dhvl__
PS C:\Users\Admin\Desktop\Ljava>
```

Program 7:

Code:

```
import java.util.*;

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

```
        System.out.println("Enter the range of the number");
        System.out.print("From  ");
        Scanner sc =new Scanner(System.in);
        int ri=sc.nextInt();
        System.out.print("to  ");
        int re=sc.nextInt();
        int n;
        n=(int)(Math.random()*(re-ri))+ri;
        System.out.println("your random nuber is "+n);
        System.out.println("squer root of that number is "+Math.sqrt(n));
    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> java code
Enter the range of the number
From  12
to  76
your random nuber is 32
squer root of that number is 5.656854249492381
```

Program 8:

Code:

```
import java.util.*;

public class code
{


    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int n=(int)3.14;

        float f=(float)3.14d;
        System.out.println(n+" "+f+" "+(float)2/5);
```

```
    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> javac code.java
PS C:\Users\Admin\Desktop\Ljava> java code
3 3.14 0.4
PS C:\Users\Admin\Desktop\Ljava>
```

Program 9:

Code:

```
import java.util.*;

public class code
{


    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        int t,r,l=0,w;
        System.out.println("enter 1 for rectangle,2 for square and 3 for circle");
        t=sc.nextInt();
        if(t==3){
            System.out.println("enter redius");
            r=sc.nextInt();
            System.out.println("Area= "+Math.PI*r*r);
            return;
        }else{
            System.out.println("enter length ");
            l=sc.nextInt();
        }
        if(t==1){
            System.out.println("enter width ");
            w=sc.nextInt();
        }else{
            w=l;
        }
```

```
        System.out.println("Area = "+w*l);
    }
}
```

Output:

```
PS C:\Users\Admin\Desktop\Ljava> java code
enter 1 for rectangle,2 for square and 3 for circle
3
enter redius
5
Area= 78.53981633974483
PS C:\Users\Admin\Desktop\Ljava>
```