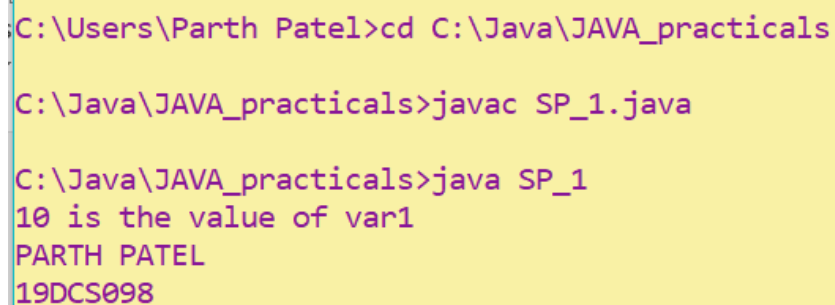# PRACTICAL-1

Write a program that declares one integer variable called var1. Give value 10 to this variable and then, using one println() statement, display the value on the screen like this:

"10 is the value of var1."

PROGRAM CODE:

```
class SP_1
{
        public static void main(String[] args)
        {
                int var1=10;
                System.out.println(var1+" is the value of var1");
                System.out.println("PARTH PATEL");
                System.out.println("19DCS098");
        }
}
```

OUTPUT:

```
C:\Users\Parth Patel>cd C:\Java\JAVA_practicals

C:\Java\JAVA_practicals>javac SP_1.java

C:\Java\JAVA_practicals>java SP_1
10 is the value of var1
PARTH PATEL
19DCS098
```

PRACTICAL-2

Write a console program to declare and initialize a double variable with some value such as 1234.5678. Then retrieve the integral part of the value and store it in a variable of type long, and the first four digits of the fractional part and store them in an integer of type short.

Display the value of the double variable by outputting the two values stored as integers

PROGRAM CODE:

```
class SP_2
{
        public static void main(String[] args)
        {
                double x=1234.5678;
                long x1;
                short x2;
                x1=(long)x;
                x=x%1234;
                x*=10000;
                x2=(short)x;
                System.out.println(x2+"."+x1);
                System.out.println("PARTH PATEL");
                System.out.println("19DCS098");


        }
}
```

OUTPUT:

```
C:\Java\JAVA_practicals>javac SP_2.java

C:\Java\JAVA_practicals>java SP_2
5678.1234
PARTH PATEL
19DCS098
```

PRACTICAL-3

Write an application that creates a two-dimension array with int values. The first, second and third elements should be arrays with one, two and three numbers respectively. Display the length of each dimension.

PROGRAM CODE:

```
class SP_3
{
        public static void main(String[] args)
        {

                int x[][]={{1},{1,2},{1,2,3}};
                System.out.println(x.length+" is the length of row");
                System.out.println(x[0].length+" is the length of column 1");
                System.out.println(x[1].length+" is the length of column 2");
                System.out.println(x[2].length+" is the length of column 3");
                System.out.println("PARTH PATEL");
                System.out.println("19DCS098");

        }
}
```

OUTPUT:

```
C:\Java\JAVA_practicals>javac SP_3.java

C:\Java\JAVA_practicals>java SP_3
3 is the length of row
1 is the length of column 1
2 is the length of column 2
3 is the length of column 3
PARTH PATEL
19DCS098
```

PRACTICAL-4

An electric appliance shop assigns code 1 to motor,2 to fan,3 to tube and 4 for wires. All other items have code 5 or more. While selling the goods, a sales tax of 8% to motor,12% to fan,5% to tube light,7.5% to wires and 3% for all other items is charged. A list containing the product code and price in two different arrays. Write a java program using switch statement to prepare the bill.

PROGRAM CODE:

```java
import java.util.*;
 class SP_4

 {
        public static void main(String args[])
        {
                int code[]={1,2,3,4,5};
                int price[]={200,100,50,50,500};
                double bill=0;
                Scanner input= new Scanner(System.in);
                System.out.print("Enter the code : ");
        int code2=input.nextInt();
                switch(code2)
                {
                        case 1:
                                bill+=price[0]+(price[0]*8)/100;
                                System.out.println("Product Code : "+code[0]);
                                System.out.println("Price : "+price[0]);
                                System.out.println("TOTAL : "+bill);
                                break;
                        case 2:
```

```java
                bill+=price[1]+(price[1]*12)/100;
                System.out.println("Product Code : "+code[1]);
                System.out.println("Price : "+price[1]);
                System.out.println("TOTAL : "+bill);
                break;
        case 3:
                bill+=price[2]+(price[2]*5)/100;
                System.out.println("Product Code : "+code[2]);
                System.out.println("Price : "+price[2]);
                System.out.println("TOTAL : "+bill);
                break;
        case 4:
                bill+=price[3]+(price[3]*7.5)/100;
                System.out.println("Product Code : "+code[3]);
                System.out.println("Price : "+price[3]);
                System.out.println("TOTAL : "+bill);
                break;
        case 5:
                bill+=price[4]+(price[4]*3)/100;
                System.out.println("Product Code : "+code[4]);
                System.out.println("Price : "+price[4]);
                System.out.println("TOTAL : "+bill);
                break;
        }
        input.close();
        System.out.println();
        System.out.println("PARTH PATEL");
        System.out.println("19DCS098");
    }
}
```

OUTPUT:

```
C:\Java\JAVA_practicals>java SP_4
Enter the code : 2
Product Code : 2
Price : 100
TOTAL : 112.0

PARTH PATEL
19DCS098
```

PRACTICAL-5

Write a program to show output like:

* * * * *

* * * *

* * *

* *

*

PROGRAM CODE:

```
class SP_5
{
        public static void main(String[] args)
        {
                for(int i=5;i>=1;i--)
                {
                        for(int j=1;j<=i;j++)
                                System.out.print("*");
                        System.out.println();
                }
        System.out.println("PARTH PATEL");
        System.out.println("19DCS098");
}
}
```

OUTPUT:

```
C:\Java\JAVA_practicals>javac SP_5.java

C:\Java\JAVA_practicals>java SP_5
*****
****
***
**
*
PARTH PATEL
19DCS098
```