

NAME: SAURABH SUSHIL VISHWAKARMA

ROLL NO: 61

TITLE: IMPLEMENT A PROGRAM ON 2D ARRAYS AND STRING FUNCTIONS

1] MATRIX ADDITION

CODE:

```
public class matrixaddition{
public static void main(String args[]){
    int a[][]={{1,3,4},{2,4,3},{3,4,5}};
    int b[][]={{1,3,4},{2,4,3},{1,2,4}};

    int c[][]=new int[3][3];

    for(int i=0;i<3;i++)
    {
        for(int j=0;j<3;j++)
        {
            c[i][j]=a[i][j]+b[i][j];
            System.out.print(c[i][j]+" ");
        }
        System.out.println();
    }
}
```

OUTPUT:

```
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\saur\OneDrive\Desktop\my\java>javac matrixaddition.java

C:\Users\saur\OneDrive\Desktop\my\java>java matrixaddition.java
2 6 8
4 8 6
4 6 9

C:\Users\saur\OneDrive\Desktop\my\java>|
```

2] MATRIX MULTIPLICATION

CODE:

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

int a[][]={{1,1,1},{2,2,2},{3,3,3}};
int b[][]={{1,1,1},{2,2,2},{3,3,3}};

int c[][]=new int[3][3];

for(int i=0;i<3;i++)
{
for(int j=0;j<3;j++)
{
c[i][j]=0;
for(int k=0;k<3;k++)
{
c[i][j]+=a[i][k]*b[k][j];
}
System.out.print(c[i][j]+" ");
}
System.out.println();
}
}}
```

OUTPUT:

```
C:\Users\saurya\OneDrive\Desktop\my\java>javac matrixmultiplication.java

C:\Users\saurya\OneDrive\Desktop\my\java>java matrixmultiplication.java
6 6 6
12 12 12
18 18 18

C:\Users\saurya\OneDrive\Desktop\my\java>
```

STRINGS

1] STRING SIZE

CODE:

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

```

{
public static void main(String args[])
{
String str1;
System.out.println("Enter your name");
Scanner scn =new Scanner(System.in);
    str1 = scn.next();

System.out.println("entered string is:"+str1);

System.out.println("the size of the string is"+str1.length());
}
}

```

OUTPUT:

```

C:\Users\sauray\OneDrive\Desktop\my\java>javac stringsize1.java

C:\Users\sauray\OneDrive\Desktop\my\java>java stringsize1.java
Enter your name
saurabh
entered string is:saurabh
the size of the string is7

```

2]

STRING CONCAT

CODE:

```

class Stringmal
{
public static void main(String args[])
{
    String s1= "Saurabh";
    String s2= "Vishwakarma";
String s3 = s1.concat(s2);
System.out.println(s3);
}
}

```

OUTPUT:

```
C:\Users\saur\OneDrive\Desktop\my\java>javac stringmal.java

C:\Users\saur\OneDrive\Desktop\my\java>java stringmal.java
SaurabhVishwakarma

C:\Users\saur\OneDrive\Desktop\my\java>
```

3]STRING EXAMPLE CODE:

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

String s1="hello ";
char ch[]={'s','t','r','i','n','g'};
String s2=new String(ch);
String s3=new String("example");
System.out.println(""+s1 +""+s2);
System.out.println(s2);
System.out.println(s3);
}
}
```

OUTPUT:

```
C:\Users\saur\OneDrive\Desktop\my\java>javac stringexample.java

C:\Users\saur\OneDrive\Desktop\my\java>java stringexample.java
hello string
string
example

C:\Users\saur\OneDrive\Desktop\my\java>
```