

DATE :29/05/2021

LAB CYCLE 1

Co1

AIM:Read 2 matrices from the console and perform matrix addition.

```
import java.util.*;
```

```
public class matrix {
```

```
    int row;
```

```
    int column;
```

```
    int[][] array = new int[10][10];
```

```
    public void get_metrix(){
```

```
        int rc,cc;
```

```
        Scanner sc= new Scanner(System.in);
```

```
        System.out.print("Enter size of matrix , row count : ");
```

```
        this.row = sc.nextInt();
```

```
        System.out.print("Enter size of matrix , column count : ");
```

```
        this.column = sc.nextInt();
```

```
        System.out.print("Enter matrix elements : ");
```

```
        for(rc=0;rc<this.row;rc++){
```

```
            for(cc=0;cc<this.column;cc++){
```

```

        this.array[rc][cc] = sc.nextInt();

    }

}

}

public static matrix sum(matrix c1, matrix c2) {

    int rc, cc;

    matrix temp = new matrix();

    if (c1.row == c2.row && c1.column == c2.column) {

        temp.row = c1.row;

        temp.column = c1.column;

        for (rc = 0; rc < c1.row; rc++) {

            for (cc = 0; cc < c1.column; cc++) {

                temp.array[rc][cc] = c1.array[rc][cc] + c2.array[rc][cc];

            }

        }

    }

}

```

```
else {

    System.out.println("Addition not possible ");

}

return temp;

}

public void display_matrix(){

    int rc,cc;

    for(rc=0;rc<this.row;rc++){

        for(cc=0;cc<this.column;cc++){

            System.out.print(this.array[rc][cc] );

        }

        System.out.println("");

    }

}

public static void main(String[] args)
```

```
{  
  
    matrix first = new matrix();  
  
    matrix second = new matrix();  
  
    matrix temp = sum(first, second);  
  
    first.get_matrix();  
  
    second.get_matrix();  
  
    temp = sum(first,second);  
  
    //first.display_matrix();  
  
    //second.display_matrix();  
  
    System.out.println(".....SUM MATRIX.....");  
    temp.display_matrix();  
    System.out.println(".....END.....");  
  
}  
  
}
```