Strings and arrays :

Matrix addition:

Main.java

Run

Output

```
import java.util.Scanner;
class HelloWorld {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int mat1[][]={{1,2},{5,3}};
        int mat2[][]={{2,3},{4,1}};
        int mat_sum[][]=new int[2][2];
        int len=mat1.length;
        for(int i=0;i<len;i++)
        {
        for(int j=0;j<len;j++)
        {
        mat_sum[i][j]=mat1[i][j]+mat2[i][j];
        System.out.print(mat_sum[i][j]+"\t");
        }
        System.out.println();
         }
    }
}
```

```
java -cp /tmp/AuiJfsLbEh/HelloWorld
3   5
9   4

=== Code Execution Successful ===
```

Matrix multiplication:

Main.java

Run

Output

```
    Scanner input=new Scanner(System.in);
    int r=input.nextInt();
    int c=input.nextInt();
    int mat1[][]=new int[r][c];
    int mat2[][]=new int[r][c];
    for(int i=0;i<r;i++)
    {
    for(int j=0;j<c;j++)
    {
    mat1[i][j]=input.nextInt();
    }
     }
    for(int i=0;i<r;i++)
    {
     for(int j=0;j<c;j++)
     {
    mat2[i][j]=input.nextInt();
     }
      }
      int sum[][]=new int[r][c];
       for(int i=0;i<r;i++)
       {
      for(int j=0;j<c;j++)
       {
         sum[i][j]=0;
        for(int k=0;k<c;k++)
        {
         sum[i][j] = sum[i][j] +(mat1[i][k]*mat2[k][j]);
         }
          System.out.print(sum[i][j] + "\t");
          }
        System.out.println();
        }
}
```

```
java -cp /tmp/Yftk7hHSvn/HelloWorld
3
3
1 2 3
4 5 6
7 8 9
1 2 3
4 5 6
7 8 9
30  36  42
66  81  96
102 126 150

=== Code Execution Successful ===
```

Vowel count:

Main.java

Run

Output

```
import java.util.Scanner;
class HelloWorld {
    public static void main(String[] args) {
       Scanner input=new Scanner(System.in);
       String name=input.nextLine();
        int len=name.length();
        char a[]=new char[len];
        int vow=0;
        for(int i=0;i<len;i++)
        {
           a[i]=name.charAt(i);
          if(a[i]=='a'||a[i]=='e'||a[i]=='i'||a[i]=='o'||a[i]=='u'
          ||a[i]=='A'||a[i]=='E'||a[i]=='I'||a[i]=='O'||a[i]=='U')
           vow=vow+1;
             }
          System.out.println(vow);
    }
}
```

```
java -cp /tmp/pbej6OJ17p/HelloWorld
kongarasai\
5

=== Code Execution Successful ===
```

Print vowel and consonant:

```
class HelloWorld {
    public static void main(String[] args) {
       Scanner input=new Scanner(System.in);
          String name=input.nextLine();
          int len=name.length();
           char a[]=new char[len];
            char vow[]=new char[len];
               char con[]=new char[len];
                int v=0,c=0;
                 for(int i=0;i<len;i++)
                   {
                    a[i]=name.charAt(i);
                   if(a[i]=='a'||a[i]=='e'||a[i]=='i'||a[i]=='o'||a[i]=='u'
                   ||a[i]=='A'||a[i]=='E'||a[i]=='I'||a[i]=='O'||a[i]=='U') {
                        vow[v] = a[i];
                        v++;
                            }
                         else {
                        con[c] = a[i];
                        c++;
                         }
                           }
                        System.out.print("Consonants: ");
                         for(int i=0;i<v;i++)
                            {
                         System.out.print(vow[i]);
                              }
                           System.out.print("\nvowels: ");
                             for(int j=0;j<c;j++)
                                 {
                             System.out.print(con[j]);
```

```
java -cp /tmp/yVhzolwx9b/HelloWorld
kongarasai
Consonants: oaaai
vowels: kngrs
=== Code Execution Successful ===
```

Replace vowel:

```
1  import java.util.Scanner;
2  class HelloWorld {
3      public static void main(String[] args) {
4          Scanner input=new Scanner(System.in);
5            String name=input.nextLine();
6             String n1=name.replaceAll("[aeiouAEIOU]","");
7                 System.out.println(n1);
8                                     }
9                 }
```

```
java -cp /tmp/xJweHzLeiy/HelloWorld
kongarasai
kngrs

=== Code Execution Successful ===
```

Increasing alphabet order:

Main.java Run Output

```
1  import java.util.Scanner;
2  import java.util.Arrays;
3  public class ak
4  {
5  public static void main(String args[])
6  {
7  Scanner input=new Scanner(System.in);
8  String name=input.nextLine();
9  int len=name.length();
10 char arr[]=new char[len];
11 String Alpha;
12 for(int i=0;i<len;i++)
13 {
14 arr[i]=name.charAt(i);
15 }
16 Arrays.sort(arr);
17 for(int i=len-1;i>=0;i--)
18 {
19 System.out.print(arr[i]+" ");
20 }
21 }
22 }
```

```
java -cp /tmp/8l41mOhePz/ak
kongarasai
s r o n k i g a a a
=== Code Execution Successful ===
```

Matrix multiplication:

Main.java

```
int mat1[][]=new int[r][c];
int mat2[][]=new int[r][c];
for(int i=0;i<r;i++)
{
for(int j=0;j<c;j++)
{
mat1[i][j]=input.nextInt();
}
}
for(int i=0;i<r;i++)
{
for(int j=0;j<c;j++)
{
mat2[i][j]=input.nextInt();
}
}
int sum[][]=new int[r][c];
for(int i=0;i<r;i++)
{
for(int j=0;j<c;j++)
{
sum[i][j]=0;
for(int k=0;k<c;k++)
{
sum[i][j] = sum[i][j] +(mat1[i][k]*mat2[k][j]);
}
System.out.print(sum[i][j] + "\t");
}
System.out.println();
```

Output

```
java -cp /tmp/1d8RFmG5V3/HelloWorld
3
3
1 2 3
1 2 3
1 2 3
4 5 6
4 5 6
4 5 6
24  30  36
24  30  36
24  30  36

=== Code Execution Successful ===
```

Finding word:

Main.java

```
import java.util.Scanner;
public class hello{
    public static void main(String[] args) {
        Scanner input=new Scanner(System.in);
        String n=input.next();
        char c=input.next().charAt(0);
        char arr[]=new char[n.length()];
        int len=n.length();
        int x=0;
        for (int i=0;i<len;i++){
            arr[i]=n.charAt(i);
            if(arr[i]==c){
                System.out.print(i);
                x=1;

            }
        }
        if(x==0){
            System.out.print("not fount");
        }
    }
}
```

Output

```
java -cp /tmp/qNZ6Xb4nfV/hello
kongara
r
5
=== Code Execution Successful ===
```