1. **Addition of Three numbers**

PROGRAM:

```
import java.util.Scanner;
public class nani
{
   public static void main(String[] args)
   {
      Scanner input=new Scanner(System.in);
      int n1,n2,n3,sum=0;
      System.out.println("enter the number 1: ");
                n1=input.nextInt();
                System.out.println("enter the number 2: ");
                n2=input.nextInt();
                System.out.println("enter the number 3: ");
                n3=input.nextInt();
                sum=n1+n2+n3;
                System.out.println("sum is : "+ sum);
   }
}
```

Output

```
java -cp /tmp/MABPwDEVLV/nani
enter the number 1:
2
enter the number 2:
3
enter the number 3:
4
sum is : 9

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

2. Addition of two matrices

PROGRAM:

```
import java.util.Scanner;
public class Matrixaddition
{
   public static void main(String[] args)
   {
      Scanner input=new Scanner(System.in);
      int r,c;
      System.out.print("enter the number of rows ");
      r=input.nextInt();
      System.out.print("enter the number of columns ");
      c=input.nextInt();
      int i,j;
      int a[][]=new int[r][c];
      int b[][]=new int[r][c];
      int d[][]=new int[r][c];
      System.out.println("ente rthe first matrix elements ");
      for(i=0;i<r;i++)
      {
         for(j=0;j<c;j++)
         {
            a[i][j]=input.nextInt();
         }
         System.out.println();
      }
      System.out.println("ente rthe second matrix elements ");
      for(i=0;i<r;i++)
      {
         for(j=0;j<c;j++)
         {
            b[i][j]=input.nextInt();
         }
         System.out.println();
      }
      System.out.print("the sum of matrices elements is  ");
```

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

Output

```
java -cp /tmp/sjAkswg7zs/Matrixaddition
enter the number of rows 2
enter the number of columns 2
ente rthe first matrix elements
1
1

1
1

ente rthe second matrix elements
1
1

1
1

the sum of matrices elements is  2 2
2 2

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

3. Arrange the Array elements in Ascending Order

PROGRAM:

```
import java.util.Scanner;
public class order
{
  public static void main(String[] args)
  {
     Scanner input=new Scanner(System.in);
     int n,i,j;
     System.out.println("enter the array size: ");
     n=input.nextInt();
     int arr[]=new int[n];
     System.out.println("enter the array elements: ");
     for(i=0;i<n;i++)
     {
        arr[i]=input.nextInt();
     }
     for(i=0;i<n-1;i++)
     {
        for(j=0;j<n-i-1;j++)
        {
           if(arr[j]>arr[j+1])
           {
              int temp=arr[j];
              arr[j]=arr[j+1];
              arr[j+1]=temp;
           }
        }
     }
     System.out.print("order of  the array elements is : ");
     for(i=0;i<n;i++)
     {
        System.out.println(arr[i]);
     }
  }
}
```

```
Output
java -cp /tmp/q22sKOOtEV/Matrixaddition
enter the array size:
5
enter the array elements:
9
1
7
5
8
order of  the array elements is : 1
5
7
8
9

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

4. **Arrange the letters in alphabetical order**

PROGRAM:

```
import java.util.Scanner;
import java.util.Arrays;

public class LetterSort
{
   public static void main(String[] args)
   {
      Scanner input = new Scanner(System.in);
      System.out.print("Enter a word: ");
      String word = input.nextLine();
      char[] letters = word.toCharArray();
      Arrays.sort(letters);
      String sortedWord = new String(letters);
      System.out.println("Letters in alphabetical order: " + sortedWord);
```

```
        input.close();
    }
}
```

```
java -cp /tmp/e63Wtg8oGV/LetterSort
Enter a word: good boy
Letters in alphabetical order:  bdgoooy

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

5.Reverse a String

PROGRAM:

```
import java.util.Scanner;
public class LetterSort
{
   public static void main(String[] args)
    {
       Scanner input = new Scanner(System.in);
       String s;
       System.out.print("Enter a string: ");
       s=input.nextLine();
        System.out.print("reversed string is : ");
       for(int i=s.length()-1;i>=0;i--)
       {
          System.out.print(s.charAt(i));
       }
      }
}
```

Output

```
java -cp /tmp/HQ5ZFKH1c3/LetterSort
Enter a string: good boy
reversed string is : yob doog
=== Code Execution Successful ===
```