

// Write a Java program to read and print elements of array.

```
class AP1
{
    public static void main(String args[])
    {
        int a[] = {10,20,30,40,50};
        int i;

        for (i=0;i<a.length;i++)
        {
            System.out.println(a[i]);
        }
    }
}
```

// Write a Java program to print all negative elements in an array.

```
class AP2
{
    public static void main(String args[])
    {
        int a[] = {10,20,-30,40,50,-60};
        int i;

        for (i=0;i<a.length;i++)
        {
            if (a[i]<0)
            {
                System.out.println(a[i]);
            }
        }
    }
}
```

// Write a Java program to find sum of all array elements.

```
class AP3
{
    public static void main(String args[])
    {
        int a[] = {10,20,-30,40,50,-60};
        int i,sum=0;

        for (i=0;i<a.length;i++)
        {
            {
                sum += a[i];
            }
        }
        System.out.println("Sum of Array Elements is: "+sum);
    }
}
```

// Write a Java program to find maximum and minimum element in an array.

```
class AP4
{
    public static void main(String args[])
    {
        int a[] = {10,20,-30,40,50,-60};
        int i,max,min;
        max = a[0];
        min = a[0];

        for (i=0;i<a.length;i++)
        {
            if (a[i]>max)
            {
                max = a[i];
            }
            else if (a[i]<min)
            {
                min = a[i];
            }
        }

        System.out.println("Max element of array is: "+max);
        System.out.println("Min element of array is: "+min);
    }
}
```

// Write a Java program to find second largest element in an array.

```
class AP5
{
    public static void main(String args[])
    {
        int a[] = {10,20,-30,40,50,-60};
        int i,j;
        for (i=0;i<a.length;i++)
        {
            for (j=i+1;j<a.length;j++)
            {
                int temp;
                if (a[i]<a[j])
                {
                    temp = a[i];
                    a[i] = a[j];
                    a[j] = temp;
                }
            }
        }
        System.out.println("Second Largest element of array is: "+a[1]);
    }
}
```

// Write a Java program to count total number of even and odd elements in an array.

```
class AP6
{
    public static void main(String args[])
    {
        int a[] = {10,21,30,41,50,60};
        int i,even=0,odd=0;

        for (i=0;i<a.length;i++)
        {
            if (a[i]%2 == 0)
            {
                even++;
            }
            else
            {
                odd++;
            }
        }
        System.out.println("Even elements are: "+even);
        System.out.println("Odd elements are: "+odd);
    }
}
```

// Write a Java program to count total number of negative elements in an array.

```
class AP7
{
    public static void main(String args[])
    {
        int a[] = {10,-21,30,-41,50,-60};
        int i,neg = 0;

        for (i=0;i<a.length;i++)
        {
            if (a[i] < 0)
            {
                neg++;
            }
        }
        System.out.println("Negative elements are: "+neg);
    }
}
```

*// Write a Java program to copy all elements from an array to another array.*

```
import java.util.*;
class AP8
{
    public static void main(String args[])
    {
        int a[] = new int[5];
        int b[] = new int [5];
        int i;
        Scanner sc = new Scanner(System.in);

        for (i=0;i<5;i++)
        {
            a[i] = sc.nextInt();
        }
        for (i=0;i<5;i++)
        {
            b[i] = a[i];
        }
        System.out.println("B array is: ");
        System.out.println(Arrays.toString(b));
    }
}
```



// Write a Java program to insert an element in an array.

```
import java.util.*;
class AP9
{
    public static void main(String args[])
    {
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter size of array: ");
        n = sc.nextInt();
        int a[] = new int[n+1];
        int i,num;

        for (i=0;i<n;i++)
        {
            a[i] = sc.nextInt();
        }

        System.out.println("Enter Position of element: ");
        int pos = sc.nextInt();
        System.out.println("Enter element to be added: ");
        num = sc.nextInt();

        for (i=n-1;i>=(pos-1);i--)
        {
            a[i+1] = a[i];
        }
        a[pos-1] = num;

        for (i=0;i<n;i++)
        {
            System.out.print(a[i]+" ");
        }
    }
}
```

*// Write a Java program to delete an element from an array at specified position.*

```
import java.util.*;
class AP10
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        int n;
        System.out.println("Enter number of elements of Array: ");
        n = sc.nextInt();
        int a[] = new int[n];
        int i;
        System.out.println("Enter Array Elements: ");
        for (i=0;i<n;i++)
        {
            a[i] = sc.nextInt();
        }

        System.out.println("Enter Position of Element: ");
        int pos = sc.nextInt();

        for (i=pos;i<n-1;i++)
        {
            a[i] = a[i+1];
        }
        n = n-1;

        System.out.println(Arrays.toString(a));
    }
}
```

// Write a JAVA Program to accept array of N integers and find Largest odd number as well as largest even number and display them

```
import java.util.Scanner;

class Q211 {
    public static void main(String[] arg) {
        Scanner sc = new Scanner(System.in);
        System.out.print("\n Enter Size of Array: ");
        int N = sc.nextInt();
        int a[] = new int[N];
        int i;
        int Max_even = 1;
        int Max_odd = 0;

        for (i = 0; i < N; i++) {
            System.out.print("Enter Array Element" + i + ": ");
            a[i] = sc.nextInt();
            if (a[i] % 2 == 0) {
                Max_even = a[i];
            }
            else {
                Max_odd = a[i];
            }
        }

        for (i = 0; i < N; i++) {
            if (a[i] % 2 == 0) {
                if (a[i] > Max_even) {
                    Max_even = a[i];
                }
            }
            else {
                if (a[i] > Max_odd) {
                    Max_odd = a[i];
                }
            }
        }

        if (Max_even == 1) {
            System.out.print(" \n you have not entered any even number");
            System.out.print("\n Maximum of odd Array Elements = " + Max_odd);
        }
        else if (Max_odd == 0) {
            System.out.print(" \n you have not entered any odd number");
            System.out.print("\n Maximum of Even Array Elements = " +
Max_even);
        }
    }
}
```

```
        else {  
            System.out.print("\n Maximum of odd Array Elements = " + Max_odd  
);  
            System.out.print("\n Maximum of Even Array Elements = " +  
Max_even);  
        }  
    }  
}
```

```
// Write a program in JAVA to sort N integer Numbers in ascending order.
```

```
import java.util.Scanner;

class Q212{
    public static void main(String args[]){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter size of Array: ");
        int N = sc.nextInt();
        int a[] = new int[N];

        for (int i=0;i<N;i++){
            System.out.printf ("Enter a[%d]: ",i);
            a[i] = sc.nextInt();
        }
        System.out.println("Array is: ");
        for (int x: a){
            System.out.print(x+" ");
        }
        System.out.println();

        for (int i=0;i<N;i++){
            int temp = 0;
            for (int j = i+1;j<N;j++){
                if (a[i]>a[j]){
                    temp = a[i];
                    a[i] = a[j];
                    a[j] = temp;
                }
            }
        }
        System.out.println("Array in Ascending order is: ");
        for (int x: a){
            System.out.print (x+ " ");
        }

    }
}
```

// Write a program to store n numbers in an array. Then find out Sum, Maximum and Average of these n numbers.

```
import java.util.Scanner;

class Q213 {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter size of Array: ");
        int N = sc.nextInt();
        int a[] = new int[N];
        int sum = 0, max = 0;

        for (int i = 0; i < N; i++) {
            System.out.printf("Enter a[%d]: ", i);
            a[i] = sc.nextInt();
        }
        System.out.println("Array is: ");
        for (int x : a) {
            System.out.print(x + " ");
        }
        System.out.println();

        max = a[0];

        for (int i = 0; i < N; i++) {
            sum += a[i];
            if (a[i] > a[0]) {
                max = a[i];
            }
        }
        double avg = (double) sum / a.length;

        System.out.println("Max element is: "+max);
        System.out.println("Sum of elements is: "+sum);
        System.out.println("Average of elements is: "+avg);
    }
}
```

*// Write a JAVA program read in an array of integers and print its elements in reverse order.*

```
import java.util.Scanner;

class Q216 {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter size of Array: ");
        int N = sc.nextInt();
        int a[] = new int[N];
        int sum = 0, max = 0;

        for (int i = 0; i < N; i++) {
            System.out.printf("Enter a[%d]: ", i);
            a[i] = sc.nextInt();
        }
        System.out.println("Array is: ");
        for (int x : a) {
            System.out.print(x + " ");
        }
        System.out.println();
        int temp = 0;
        int j = N-1;
        for (int i=0;i<N/2;i++) {
            temp = a[i];
            a[i] = a[j];
            a[j] = temp;
            j--;
        }
        System.out.println("Reversed Array is: ");
        for (int x : a) {
            System.out.print(x + " ");
        }
    }
}
```