**package** revision;

**import** java.util.Scanner;

**public** **class** Ex1 {

**public** **static** **void** main(String[] args) {

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("Enter the size of the array:");

**int** size = input.nextInt();

**int** [] Arr = **new** **int**[size];

*Read*(Arr);

*Print*(Arr);

**int** res = *summation*(Arr);

System.***out***.println("The sum is : " + res );

System.***out***.println("The maximum is : " + *Maximum*(Arr));

*EvenOdd*(Arr);

*Transfer*(Arr);

**int** [] pp = *TransferReturn*(Arr);

System.***out***.println("The returned array is: ");

*Print*(pp);

}

**public** **static** **void** Read(**int** Arr[])

{

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("Enter your array:");

**for**(**int** i = 0; i< Arr.length; i++)

Arr[i] = input.nextInt();

}

**public** **static** **void** Print(**int** Arr[])

{

System.***out***.println("Your array is:");

**for**(**int** i = 0; i< Arr.length; i++)

System.***out***.print(Arr[i] + " ");

System.***out***.println("");

}

**public** **static** **int** summation(**int** Arr[])

{

**int** sum =0;

**for**(**int** i = 0; i< Arr.length; i++)

sum += Arr[i];

**return** sum;

}

**public** **static** **int** Maximum(**int** Arr[])

{

**int** max = Arr[0];

**for**(**int** i = 1; i< Arr.length; i++)

**if**(Arr[i] > max)

max = Arr[i];

**return** max;

}

**public** **static** **int** [] TransferReturn(**int** Arr[])

{

**int** Tpos[] = **new** **int**[Arr.length];

**int** Tneg [] = **new** **int**[Arr.length];

**int** j=0, k =0;

**for**(**int** i = 0; i< Arr.length; i++)

**if**(Arr[i] >= 0)

Tpos[j++] = Arr[i];

**else**

Tneg[k++] = Arr[i];

System.***out***.println("The negative Array is: ");

*Print*(Tneg);

**return** Tpos;

}

**public** **static** **void** Transfer(**int** Arr[])

{

**int** Tpos[] = **new** **int**[Arr.length];

**int** Tneg [] = **new** **int**[Arr.length];

**int** j=0, k =0;

**for**(**int** i = 0; i< Arr.length; i++)

**if**(Arr[i] >= 0)

Tpos[j++] = Arr[i];

**else**

Tneg[k++] = Arr[i];

System.***out***.println("The positive Array is: ");

*Print*(Tpos);

System.***out***.println("The negative Array is: ");

*Print*(Tneg);

}

**public** **static** **void** EvenOdd(**int** Arr[])

{

**int** countEven =0, countOdd =0;

**for**(**int** i = 0; i< Arr.length; i++)

**if**(Arr[i] % 2 == 0)

countEven++;

**else** countOdd++;

System.***out***.println("The number of Even is : " + countEven);

System.***out***.println("The number of Odd is : " + countOdd);

}

}