1D - Arrays

Program 01 - write a program that creates an integer array of 10 elements, accept values of arrays and then display the values.

```
import java.util.*;
 public class test{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 10 array elements :");
        int arr[] = new int[10];
        for(int i = 0; i < arr.length; i++)
        arr[i] = sc.nextInt();
        System.out.println("Array : ");
        for(int i = 0; i < arr.length; i++)
        System.out.print(arr[i] + " ");

        }
    }
```

Program 02 - Write a program that creates an integer array of 10 elements, accepts values of array and prints the array in reverse order.

```
    import java.util.*;
    public class test{
        public static void main(String[] args){
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter 10 array elements :");
            int arr[] = new int[10];
```

```
        for(int i=0; i<arr.length; i++)
        arr[i] = sc.nextInt();
        System.out.print("Original array :" + " ");
        for(int j=0; j<arr.length; j++)
        System.out.print(arr[j]);
        System.out.print("Reverse array :");
        for(int k = arr.length-1; k>=0; k--)
        System.out.print(arr[k] + " ");
    }
};
```

Program 03 - write a program that creates an integer array of 10 elements, accepts values of arrays and then find sum, average, maximum, minimum values.

```
import java.util.*;
   public class test{
      public static void main(String[] args){
Scanner sc = new Scanner(System.in);
int sum = 0, max, min;
double average;
System.out.println("Enter 10 array elements :");
int arr[] = new int[10];
for(int i = 0; i<arr.length; i++)
arr[i] = sc.nextInt();
System.out.println("Array :");
max = arr[0];
min = arr[0];
for(int j = 0; j < arr.length; j++){
   if(min > arr[j]){
      min = arr[j];
   }
   if(max < arr[j]){
      max = arr[j];
   }
```

```
    sum += arr[j];
}
average = (double) sum / arr.length;
System.out.println("sum :" + sum);
System.out.println("average :" + average);
System.out.println("maxx :" + max);
System.out.println("min :" + min);
        }
    }
```

Program 04 - write a program that creates an integer array of 10 elements, accepts values of array and print only even numbers.

```
import java.util.*;
  public class test{
      public static void main(String[] args){
          Scanner sc =  new Scanner(System.in);
          System.out.println("Enter 10 array elements :");
          int arr[] = new int[10];
          for(int i = 0; i<arr.length; i++)
          arr[i] = sc.nextInt();
          System.out.println("Even numbers :");
          for(int j = 0; j < arr.length; j++){
              if(arr[j] % 2 == 0){
                  System.out.println(arr[j]);
              }
          }

      }
  }
```

Program 05 - write a program that creates an integer array of 10 elements, accepts values of array and find sum of odd numbers.

```
import java.util.*;
  public class test{
     public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 10 array elements :");
        int sumOdd = 0;
        int arr[] = new int[10];
        for(int i = 0; i < arr.length; i++)
        arr[i] = sc.nextInt();
        for(int j = 0; j < arr.length; j++){
           if(arr[j] % 2!= 0){
              sumOdd = sumOdd + arr[j];
           }
        }
        System.out.println("sum of odd numbers : " + sumOdd);
     }
  }
```