**Arrange the elements in ascending and descending order using Bubble sort method.**

import java.util.Scanner;

class bubble{

static void sort(int[] a)

{

int x=a.length;

int t;

for(int i=0;i<x-1;i++)

{

for(int j=0;j<x-1;j++)

{

if(a[j+1]>a[j])

{

t=a[j];

a[j]=a[j+1];

a[j+1]=t;

}

}

}

System.out.println("descending");

for(int i=0;i<x;i++)

{

System.out.print(a[i]+" "); // it will print all outputs in one line, instead of putting, like in C after identifier, we put +, and then comment statement in double quotes

}

for(int i=0;i<x-1;i++)

{

for(int j=0;j<x-1;j++)

{

if(a[j+1]<a[j])

{

t=a[j];

a[j]=a[j+1];

a[j+1]=t;

}

}

}

System.out.println();

System.out.println("ascending");

for(int i=0;i<x;i++)

{

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

}

}

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

System.out.println("enter array length");

int n=sc.nextInt(); // read array length

int arr[]=new int[n]; // dynamic memory allocation

for(int i=0;i<n;i++)

{

System.out.println("enter the "+(i+1)+"th element");

arr[i]=sc.nextInt();

}

sort(arr);

}

}

INPUT/OUTPUT:

enter array length

5

enter the 1th element

3

enter the 2th element

6

enter the 3th element

2

enter the 4th element

1

enter the 5th element

3

descending

6 3 3 2 1

ascending

1 2 3 3 6