**9 )Write a program to sort an Array in Ascending/Descending Order.**

**Ascending :**

import java.util.Scanner;

public class SortArray {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter the number of elements in the array: ");

int n = sc.nextInt();

int[] arr = new int[n];

System.out.println("Enter the elements:");

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

arr[i] = sc.nextInt();

}

// Bubble Sort for ascending order

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

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

{

if (arr[j] > arr[j+1]) {

// Swap arr[j] and arr[j+1]

int temp = arr[j];

arr[j] = arr[j+1];

arr[j+1] = temp;

}

}

}

System.out.println("Sorted array in ascending order:"); for (int i = 0; i < n; i++) {

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

}

System.out.println();

}

}

**Descending :**

import java.util.Scanner;

public class SortArrayDescending {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter the number of elements in the array: ");

int n = sc.nextInt();

int[] arr = new int[n];

System.out.println("Enter the elements:");

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

arr[i] = sc.nextInt();

}

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

for (int j = 0; j < n-i-1; j++) {

if (arr[j] < arr[j+1]) {

// Swap arr[j] and arr[j+1]

int temp = arr[j];

arr[j] = arr[j+1];

arr[j+1] = temp;

}

}

}

System.out.println("Sorted array in descending order:");

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

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

}

System.out.println();

}

}