**WRITE A PROGRAM IN JAVA IMPLEMENTING THE BUBBLE SORT ALGORITHM**

package sorting;

import java.util.InputMismatchException;

import java.util.Scanner;

public class BubbleSort {

public void bubbleSort(int arr[]) {

for(int i=0; i<arr.length; i++) {

for(int j=i+1; j<arr.length; j++) {

if(arr[i] > arr[j]) {

int temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

}

public void printArray(int arr[]) {

System.out.print("[");

for(int i=0; i<arr.length; i++) {

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

if(i != arr.length-1) {

System.out.print(",");

}

}

System.out.print("]");

System.out.println();

}

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

BubbleSort obj = new BubbleSort();

try {

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

int size = sc.nextInt();

if(size <= 0) {

System.out.println("Invalid input");

sc.close();

return;

}

int arr[] = new int[size];

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

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

arr[i] = sc.nextInt();

}

System.out.println("Original array: ");

obj.printArray(arr);

obj.bubbleSort(arr);

System.out.println("\nAfter sorting: ");

obj.printArray(arr);

} catch (InputMismatchException e) {

System.out.println("Invalid input");

}

sc.close();

}

}