Assignment 1: Pseudocode and Flowchart for Sorting Algorithm - Write  
pseudocode and create a flowchart for a bubble sort algorithm. Provide a  
brief explanation of how the algorithm works and a simple array of integers  
to demonstrate a dry run of your algorithm.

1. Algorithm
2. Start
3. Input array of elements to be sorted
4. Set n as length of array
5. Iterate through array
6. Compare each adjacent pair of elements
7. If the first element is smaller than the second element
   1. Swap the elements
8. End.
9. Pseudo code

BubbleSort(arr)

N=arr length

For i->1 to N-1

For j->0 to N-i-1

If arr[j]> arr[j+1]

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

Print “sorted array”

1. Code

Bubble Sort(int[] arr)

{

int size=sizeof(arr)/sizeof(arr[0]);

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

{

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

{

If(arr[j]>arr[j+1]

{

int temp=arr[j];

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

arr[j+1]=temp;

}

}

}

}

1. Flowchart

