**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.**

**Pseudocode :-**

Start

Let A = array

n = length of array

for i from 0 to n-1

for j from 0 to n-1-i

if A[j] > A[j+1]

swap A[j] and A[j+1]

end if

end for

end for

end procedure

**FLOWCHART:-**

A diagram of a algorithm

Description automatically generated

ALGORITHM:-

Start

Set i = 1

Set j = 0

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

then swap a[j] and a[j+1]

j = j + 1

if (j < (n-i), go to step 4

i + 1

if( i < n ) , go to step 3

stop

Example:

Input Array: {7,2,3,2,8,2,9}

Sorted Array: {2,2,2,3,7,8,9}