**Bubble sort** is a simple sorting algorithm. This sorting algorithm is comparison based algorithm in which each pair of adjacent elements is compared and elements are swapped if they are not in order. This algorithm is not suitable for large data sets as its average and worst case complexity are of O(n2) where n are no. of items.

How does it work?

We take an unsorted array for our example. Bubble sort take Ο(n2) time so we're keeping short and precise.

Bubble sort starts with very first two elements, comparing them to check which one is greater.

JAVA Implementation

public static void BubbleSort( int [ ] num )

{

int j;

boolean flag = true; // set flag to true to begin first pass

int temp; //holding variable

while ( flag )

{

flag= false; //set flag to false awaiting a possible swap

for( j=0; j < num.length -1; j++ )

{

if ( num[ j ] < num[j+1] ) // change to > for ascending sort

{

temp = num[ j ]; //swap elements

num[ j ] = num[ j+1 ];

num[ j+1 ] = temp;

flag = true; //shows a swap occurred

}

}

}

}