**ALGORITHM LAB TASK**

Md jahidul islam

ID: 182-15-11497

Bubble Sort

package

com.company;

class BubbleSort

{

void bubbleSort(int a[])

{

int n = a.length;

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

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

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

{

int flag = a[j];

a[j] = a[j+1];

a[j+1] = flag;

}

}

void printArray(int x[])

{

int n = x.length;

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

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

System.out.println();

}

public static void main(String args[])

{

BubbleSort ob = new BubbleSort();

int array[] = {12,8,7,5,2};

ob.bubbleSort(array);

System.out.println("SORTED ARRAYS");

ob.printArray(array);

}

}

Bubble Sort Algorithm:

Worst case performance O(n^2)

Best case performance O(n), Average case performance O(n^2)