**Algorithm Lab**

**Assignment : 01**

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**Problem 1 :**

#include<iostream>

using namespace std;

int main()

{

int a[25],size,i,j,temp,swap;

cout<<"Enter the size of array "<<endl;

cin>>size;

cout<<"Enter the number of elements "<<endl;

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

{

cin>>a[i];

}

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

{

swap = 0;

for(j=0; j<(size-i); j++)

{

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

{

temp = a[j];

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

a[j+1] = temp;

swap = 1;

}

}

if( swap==0)

{

break;

}

}

cout<<"Your Answer: "<<endl;

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

{

cout<<" "<<a[i];

}

int getch();

return 0;

}

**Problem 2:**

#include<iostream>

using namespace std;

int main()

{

int a[25],size,i,j,temp;

cout<<"Enter the Array Size :"<<endl;

cin>>size;

cout<<"Enter the number of elements :"<<endl;

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

{

cin>>a[i];

}

for(i=1; i<size; i++)

{

temp = a[i];

j = i-1;

while(j>=0 && a[j]>temp)

{

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

j--;

}

a[j+1] = temp;

}

cout<<"Your ANSWER :"<<endl;

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

{

cout<<" "<<a[i];

}

int getch();

return 0;

}