**Assigment No:- 4.5**

**Title :-Implementation of program based on Insertion sort**

#include<iostream.h>

#include<conio.h>

class INSERTION

{

private:

int A[],n,i,j,ele,temp,ptr;

public:

void GET();

void PROCESS();

void DISPLAY();

};

void INSERTION::GET()

{

cout<<"\n Enter the Range :";

cin>>n;

cout<<"\n Element are =>";

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

cin>>A[i];

}

void INSERTION::PROCESS()

{

for(i=2;i<=n;i++)

{

ele=A[i];

j=i-1;

while(ele<A[j])

{

A[j+1]=A[j];

j--;

}

A[j+1]=ele;

}

}

void INSERTION::DISPLAY()

{

cout<<"\n Sorted element using Insertion sort:\n\t =>";

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

cout<<A[i]<<" ";

}

void main()

{

clrscr();

INSERTION s;

s.GET();

s.PROCESS();

s.DISPLAY();

getch();

}