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FDS Assignment 10

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#include<iostream>

using namespace std;

class myclass

{

int a[100],n,i,j,t;

public:

void input();

void selection();

void bubble();

};

void myclass:: input()

{

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

cin>>n;

cout<<"Enter The Marks Of Students = "<<endl;

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

{

cin>>a[i];

cout<<endl;

}

cout<<"the array before sorting = "<<" " <<endl;

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

{

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

}

}

void myclass::selection()

{

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

{

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

{

if(a[i]>a[j])

{

t=a[i];

a[i]=a[j];

a[j]=t;

}

}

}

cout<<"The array After sorting = "<<" " <<endl;

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

{

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

}

}

void myclass::bubble()

{

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

{

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

{

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

{

t=a[j];

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

a[j+1]=t;

}

}

}

cout<<"The array After sorting = "<<" " <<endl;

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

{

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

}

}

int main()

{

myclass M;

int ch;

while(1)

{

cout<<"1.selection sorting "<<endl;

cout<<"2.Bubble sorting "<<endl;

cout<<"Enter your choice "<<endl;

cin>>ch;

switch(ch)

{

case 1:

M.input();

M.selection();

break;

case 2:

M.input();

M.bubble();

break;

}

}

return 0;

}