Quess. Insertion and deletion of an element in an array

Ans.

#include <iostream>

using namespace std;

int main(){

int a[]={1,2,3,4,6,7,8,9,10};

// insert 5 at 4th index i.e at its position

int n=9;

int i;

for(i=n-1;i>=4;i--){

a[i+1]=a[i];

}

a[4]=5;

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

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

}

cout<<endl;

// delete the inserted element

for(i=4;i<10;i++){

a[i]=a[i+1];

}

for(i=0;i<9;i++){

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

}

return 0;

}

Quess. Linear Search

Ans.

#include<iostream>

using namespace std;

int main()

{

int a[]={1,2,3,4,5,6,7,8,9,10};

int n;

cout<<"enter no. of elements: ";

cin>>n;

int x,flag;

cout<<"enter no. u wanna search: ";

cin>>x;

int i;

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

{

if(a[i]==x)

flag=1;

}

if (flag==1)

cout<<"no. found";

else cout<<"no. not found";

}

Quess. Binary Search

Ans.

#include <iostream>

using namespace std;

int main()

{

int arr[10]={1,2,3,4,5,6,7,8,9,10};

cout<<"enter the no. you want to search: ";

int n;

cin>>n;

int mid;

int l=0,h=9,m;

while(l<=h)

{

mid=(h-l)+l2/2;

if (arr[mid]==n)

m=mid;

if (n<arr[mid])

h=mid-1;

else

l=mid+1;

}

if (m==mid)

cout<<"no. found at index: "<<m;

else

cout<<"no. not found";

}

Quess. Bubble sort

Ans.

#include<iostream>

using namespace std;

int main()

{

int a[]={2,5,1,6,3,8,10,7,4,9};

int i,n,j,temp;

cout<<"enter no. of elements: ";

cin>>n;

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

{

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

{

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

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

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

{

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

}

}

Quess. Matrix Multiplication

Ans.

#include<iostream>

using namespace std;

int main(){

int a[2][2],b[2][2];

int i,j;

cout<<"enter the first matrix"<<endl;

for(i=0;i<2;i++)

{

for(j=0;j<2;j++){

cin>>a[i][j];

}

}

cout<<"enter the second matrix"<<endl;

for(i=0;i<2;i++)

{

for(j=0;j<2;j++){

cin>>b[i][j];

}

}

int k,c[2][2];

for(i=0;i<2;i++)

{

for(j=0;j<2;j++){

c[i][j]=0;

for(k=0;k<2;k++){

c[i][j]=c[i][j]+a[i][k]\*b[k][j];

}

}

}

for(i=0;i<2;i++)

{

for(j=0;j<2;j++){

cout<<c[i][j]<<"\t";

}

cout<<endl;

}

}