Insertion of array

#include <iostream>

using namespace std;

int main() {

int i,e,p;

cout<<"Element & position ";

cin>>e>>p;

int a[4]={4,5,9,8};

for(i=3;i>=p;i--)

{

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

}

a[p]=e;

for(i=0;i<=4;i++)

{

cout<<a[i];

}

}

Deletion of array

#include <iostream>

using namespace std;

int main() {

int i,n,p;

int a[n];

cout<<"Size of the array ";

cin>>n;

cout<<"Enter the array";

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

{

cin>>a[i];

}

cout<<"Position of the element to be deleted";

cin>>p;

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

{

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

}

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

{

cout<<a[i];

}

}

Linear search

#include <iostream>

using namespace std;

int main() {

int i,n,e;

cout<<"Size of the array ";

cin>>n;

int a[n];

cout<<"Enter the array";

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

{

cin>>a[i];

}

cout<<"Element to be search";

cin>>e;

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

{

if(a[i]==e)

{

cout<<"Element found at"<<i;

break;

}

if(i==n)

{

cout<<"Element not found";

}

}

}

Sorting

#include<iosream>  
using namespace std;  
int main()  
{  
int n,i,min,temp,j,choice;  
cout<<"1.Bubble sort:"<<endl;  
cout<<"2.Selection sort:"<<endl;  
cout<<"3.Insertion sort:"<<endl;  
cout<<"choose yoour choice:"<<endl;  
cin>>choice;  
cout<<"enter the no. of elements:";  
cin>>n;  
int a[n];  
cout<<"enter the elements of array:";  
for(i=0;i<n;i++)  
{  
cin>>a[i];  
}  
switch(choice)  
{  
case 1:  
for(i=0;i<n-1;i++)  
{  
for(j=0;j<n-i-1;j++)  
{  
if(a[j]>a[j+1])  
{  
temp=a[j];  
       a[j]=a[j+1];  
       a[j+1]=temp;  
}  
}  
}  
  
cout<<"the bubble sorted array is:"<<endl;  
for(i=0;i<n;i++)  
{  
cout<<a[i]<<endl;  
}break;  
case 2:  
for(i=0;i<n-1;i++)  
{  
min=i;  
for(j=i+1;j<n;j++)  
{  
if(a[j]<a[min])  
{  
min=j;  
}  
}  
temp=a[min];  
a[min]=a[i];  
a[i]=temp;  
}  
cout<<"the selection sorted array is:"<<endl;  
for(i=0;i<n;i++)  
{  
cout<<a[i]<<endl;  
}  
break;  
case 3:  
for(i=1;i<n;i++)  
{  
temp=a[i];  
j=i-1;  
while(j>=0&&temp<a[j])  
{  
a[j+1]=a[j];  
j=j-1;  
}  
a[j+1]=temp;  
}  
cout<<"the insertion sorted array is:"<<endl;  
for(i=0;i<n;i++)  
{  
cout<<a[i]<<endl;  
}  
break;  
default :  
cout<<"you have entered a wrong choice";  
break;  
}  
  
}

s