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#include<iostream.h>
void in(int a[],int l);
void print(int ar[],int size);
int main(){   int a[5]={1,2,3,4,5};
in(a,5);  return 0;}           //insertion sort
void in(int a[],int l){
int i,j,t;
for(i=0;i<l;i++){   j=i;
while((i>0)&&(a[j-1]<a[j])){
t=a[j];   a[j]=a[j-1];
a[j-1]=t;   j--; }
print(a,5); }}
void print(int a[],int size){
cout<<"sorting: "; int j;
for(j=0;j<size;j++)
cout<<" "<<a[j];
cout<<"\n";}
```

```
#include<iostream.h>
const int n=7;
int main(){
int a[n],j,small,i,t,z,x;
cout<<"enter the array "<<endl;
    for(z=0;z<n;z++)
        cin>>a[z];
    for(j=0;j<n;j++) {                // selection sort
        small=j;
        for(i=j+1;i<n;i++)
            if(a[i]<a[small])
                {small=i; t=a[j];
                  a[j]=a[small];
                  a[small]=t; }
        for(x=0;x<n;x++)
            cout<<a[x]<<" ";
        return 0;    }
```

```
#include<iostream.h>
const int s=7;
int main(){
int a[s],x, i,c=0;
cout<<"enter the array "<<endl;    // sequntal search
    for(i=0;i<s;i++)
        cin>>a[s];
    cout<<"enter the element : "<<endl;
    cin>>x;
    for(i=0;i<s;i++){
        if(a[i]!=x)
            cout<<x<<" not found"<<endl;
        else
            cout<<a[i]<<" found";
    }
}
```

```
#include<iostream.h>
int main(){
int c,first,last,mid,n,search,a[12];
cout<<"enter n of elements \n";
cin>>n;
cout<<"enter array:\n";
for(c=0;c<n;c++)
cin>>a[c];
cout<<" enter x value: \n";
cin>>search;
first=0; last=n-1; mid=(first+last)/2;
while(first<=last){
if(a[mid]==search){
cout<<search<<" found in location"<<mid+1<<endl; break;}
else if(a[mid]<search)
first=mid+1;
else
last=mid-1;
mid=(first+last)/2;}
if (first>last)
cout<<"not found "<<search<<"is not present in array.\n";
return 0;}
```