#include<iostream>

using namespace std;

int main()

{

int arr[]={5,10,15,20,30};

int first=0;

int last=4;

int middle=(first+last)/2;

int search\_ele=30;

while(first<=last)

{

if(arr[middle]==search\_ele)

{

break;

}

if(arr[middle]>search\_ele)

{

last=middle-1;

cout<<middle<<endl;

cout<<arr[last]<<endl;

cout<<"element found "<<last<<" position"<<endl;

// break;

}

if(arr[middle]<search\_ele)

{

cout<<"middle="<<middle<<endl;

first=middle+1;

cout<<"first="<<first<<endl;

cout<<"element found "<<first<<" position"<<endl;

// break;

}

middle=(first+last)/2;

return 0;

}