#include<iostream>

using namespace std;

#include<algorithm>

//binary search

int binarysearch(int ra[5],int size,int searchingvalue) //called function

{

//sort(ra,ra+5); //array must be sorted if not u can use sort funtion

int low=0;

int high=size-1;

int mid;

while(low<=high)

{

mid=(low+high)/2;

if(searchingvalue==ra[mid])

{

return mid;

}

else if(searchingvalue>ra[mid])

{

low=mid+1;//update low

}

else

{

high=mid-1;

}

}

return -1;

}

//////////////////////////////////////

void main()

{

int uservalue; //for searching

int a[5]; //0,1,2,3,4

cout<<"\n\aEnter the elements in arrary=";

for(int i=0;i<5;i++)

{

cin>>a[i];

}

cout<<"\nEnter the searching value=";

cin>>uservalue;

int result=binarysearch(a,5,uservalue); //passing array calling

if(result>=0)

{

cout<<"\n\nThe no="<<a[result]<<"was found at the element with index ="<<result<<endl;

}

else

{

cout<<"Number was not found"<<endl;

}

getchar();

getchar();

}