/\*array binary search\*/

#include<stdio.h>

int main()

{

int n,i,temp,j,last,first,mid,key;

printf("enter the value of n\n");

scanf("%d",&n);

int a[n];

printf("enter the values of array\n");

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

{

scanf("%d",&a[i]);

}

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

{

for(j=i+1;j<n;j++)

{

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

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

printf("sorted array\n");

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

{

printf("%d\n",a[i]);

}

first=0;

last=n-1;

printf("enter the value of key\n");

scanf("%d",&key);

mid=(first+last)/2;

while(first<=last)

{

if(a[mid]<key)

{

first=mid+1;

}

else if(a[mid]==key)

{

printf("%d is found at %d",key,mid+1);

break;

}

else

{

last=mid-1;

mid=(first+last)/2;

}

mid=(first+last)/2;

}

if(first>last)

{

printf("value is not found");

}

return 0;

}

