Binary Search(二元搜尋)

Description

請實作Binary Search(二元搜尋)在經過前處理排序的情況底下，搜尋目標資料

Input

第一個值為待搜尋資料數量

每次搜尋

第一段為建立資料串終止輸入

第二段為欲搜尋資料

Output

若有搜尋到該筆資料

輸出提示訊息

若無找到相關資料

輸出提示訊息

Sample Input 1

```
3
1 7 9 5 3 2 4 6 7 6 1 -1
3
5 5 7 9 5 2 3 1 4 5 6 4 -1
5
9999 55555 115161 64581 32158
418 32151 321511 5555 -1
7
```

Sample Output 1

```
Found
Found
Not found
```

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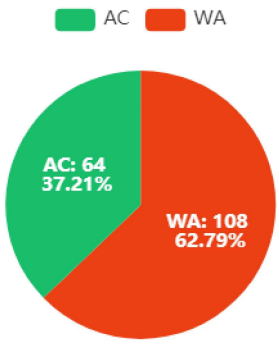
Information

ID	122802
Time Limit	1000MS
Memory Limit	256MB
IO Mode	Standard IO
Created By	m0968390
Level	Low
Tags	Show

Statistic Details



Language: C Theme: Solarized Light

```c
#include <stdio.h>
#include <stdlib.h>
int main(){
    int n,i,b,num=0;
    scanf("%d",&n);
    for(i=0;i<n;i++){
        int j=0,a[100]={0};
        scanf("%d",&num);
        while(num!=-1){
            a[j]=num;
```

```
        int l,m;
        for(l=0;l<j;l++){
            for(m=0;m<j-1;m++){
                if(a[m]>a[m+1]){
                    int t=a[m];
                    a[m]=a[m+1];
                    a[m+1]=t;
                }
            }
        }
        scanf("%d",&b);
        int k=binary_search(a,j,b);
        if(k==1){
            printf("Found");
        }
        else printf("Not found");
        if(i!=n-1)printf("\n");
    }
    return 0;
}
int binary_search(int a[],int len,int key);
int binary_search(int a[],int len,int key)/*(a)*/
{
    int mid,low=0,i,j,k=len;
    while(low<=len)
    {
        mid=(low+len)/2;
        if(mid>=k)break;
        for(i=0;i<mid;i++){;}
        if(mid!=0||a[mid]==key||a[mid]>key){;}
        for(j=mid;j<k;j++){;}
        if(mid!=0||a[mid]==key||a[mid]>key){;}
        if(a[mid]==key) return 1;
        if(a[mid]<key) low=mid+1;
        else len=mid-1;
```

You have solved the problem

Submit

Contest has ended