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**BINARY SEARCH**

**#include<stdio.h>**

**int main(){**

**int a[100],n;**

**printf("enter no. of elements\n");**

**scanf("%d",&n);**

**printf("enter elements\n");**

**for(int i=0;i<n;i++){**

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

**}**

**printf("enter search element\n");**

**int s;**

**scanf("%d",&s);**

**int first=0;**

**int last=n-1;**

**int middle=(first+last)/2;**

**while(first<=last){**

**if(a[middle]<s){**

**first=middle+1;**

**}**

**else if(a[middle]==s){**

**printf("position:%d",middle+1);**

**break;**

**}**

**else{**

**last=middle-1;**

**}**

**middle=(first+last)/2;**

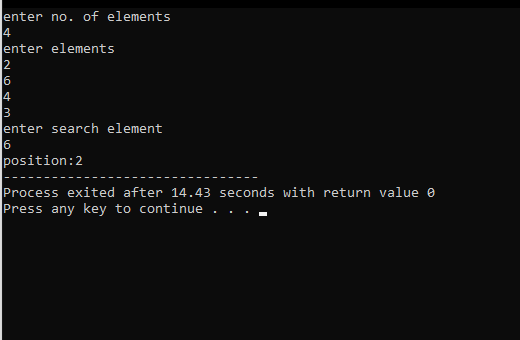
**}**

**if(first>last){**

**printf("not found");**

**}**

**return 0;**

**}**

**LINEAR SEARCH**

**#include<stdio.h>**

**int main(){**

**int a[100],n;**

**printf("enter no. of elements\n");**

**scanf("%d",&n);**

**printf("enter elements\n");**

**for(int i=0;i<n;i++){**

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

**}**

**printf("enter search element\n");**

**int s;**

**scanf("%d",&s);**

**int f=0;**

**for(int i=0;i<n;i++){**

**if(a[i]==s){**

**printf("position:%d",i+1);**

**f=1;**

**}**

**}**

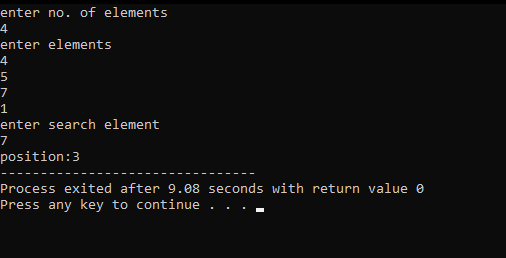
**if(f==0){**

**printf("element not found");**

**}**

**return 0;**

**}**

****

**Write a program in c to perform traversal of an array**

**#include<stdio.h>**

**int main()**

**{**

**int n, i ,a[i];**

**printf("enter the limit of array\n");**

**scanf("%d",&n);**

**printf("enter an array\n");**

**for(int i=0;i<n;i++){**

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

**}**

**printf(" your array \n");**

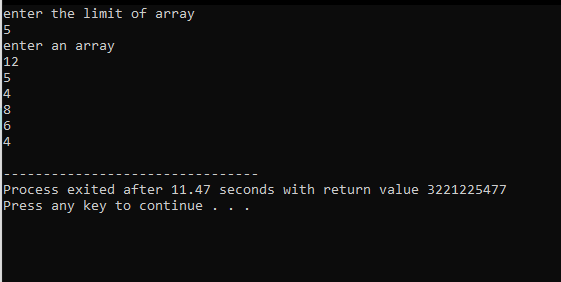
**for(int i=0;i<n;i++){**

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

**}**

**return 0;**

**}**

****