```c
#include<stdio.h>
#include<conio.h>
int n,val,a[20];
void search(int n,int val){
int first=0;
int last=n-1;
int middle=(first+last)/2;
while(first<=last){
if(a[middle]==val){
printf("\nvalue found at position %d",middle);
break;
}
else if(a[middle]<val){
first=middle+1;
}
else if(a[middle]>val){
last=middle-1;
}
middle=(first+last)/2;
}
if(first>last){
```

```c
}

middle=(first+last)/2;
}

if(first>last){
printf("\nvalue not found.");
}
}

void main(){
int i;
clrscr();
printf("\nenter size:");
scanf("%d",&n);
printf("\nenter elements:");
for(i=0;i<n;i++){
scanf("%d",&a[i]);
}

printf("\nenter value to search:");
scanf("%d",&val);
search(n,val);
getch();
}
```

```
enter size:5

enter elements:3
8
9
4
2

enter value to search:9

value found at position 2
```