

6. Write a C program to search for a specific element in an array using linear search with a user defined function.

```
#include <stdio.h>

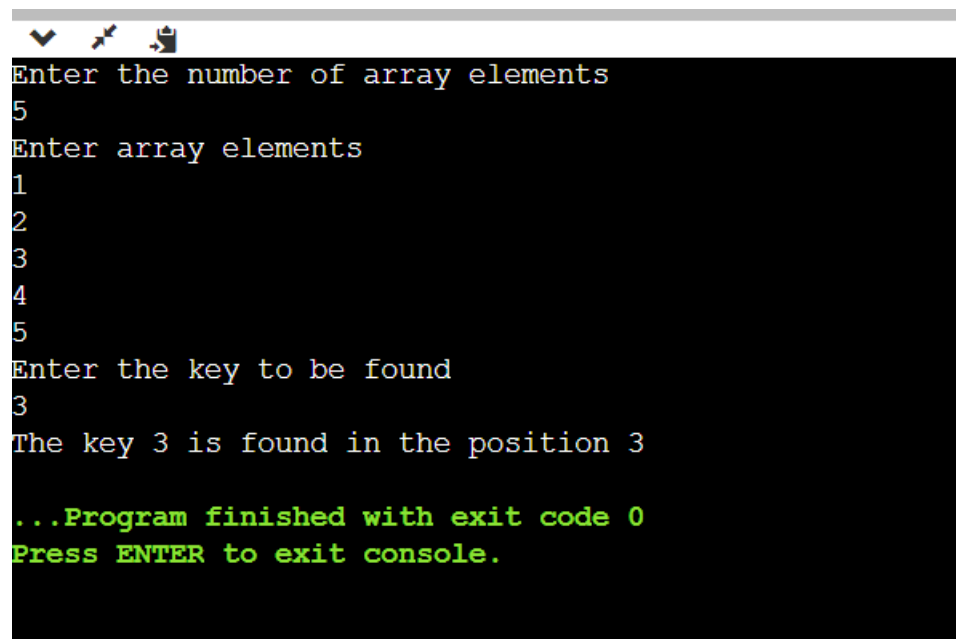
#include <stdlib.h>

void search(int *a,int key,int n)
{
    int i;
    for(i=0;i<n;i++)
    {
        if(key==a[i])
        {
            printf("The key %d is found in the position %d",key,i+1);
            exit(0);
        }
    }
    printf("The key %d is not found",key);
}

void main()
{
    int i,a[10];
    int n,key;
    printf("Enter the number of array elements\n");
    scanf("%d",&n);
    printf("Enter array elements\n");
    for(i=0;i<n;i++)
    {
```

```
        scanf("%d",&a[i]);  
    }  
    printf("Enter the key to be found\n");  
    scanf("%d",&key);  
    search(a,key,n);  
}
```

OUTPUT:



```
Enter the number of array elements  
5  
Enter array elements  
1  
2  
3  
4  
5  
Enter the key to be found  
3  
The key 3 is found in the position 3  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```