

/*array searching(linear search)*/

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int n,i,found,location,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]);
```

```
    }
```

```
    printf("enter your key(search)element\n");
```

```
    scanf("%d",&key);
```

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

```
    {
```

```
        if(a[i]==key)
```

```
        {
```

```
            found=1;
```

```
            location=i;
```

```
            break;
```

```
        }
```

```
        else
```

```
        {
```

```
            found=0;
```

```
        }
```

```
    }
```

```
    if(found==0)
```

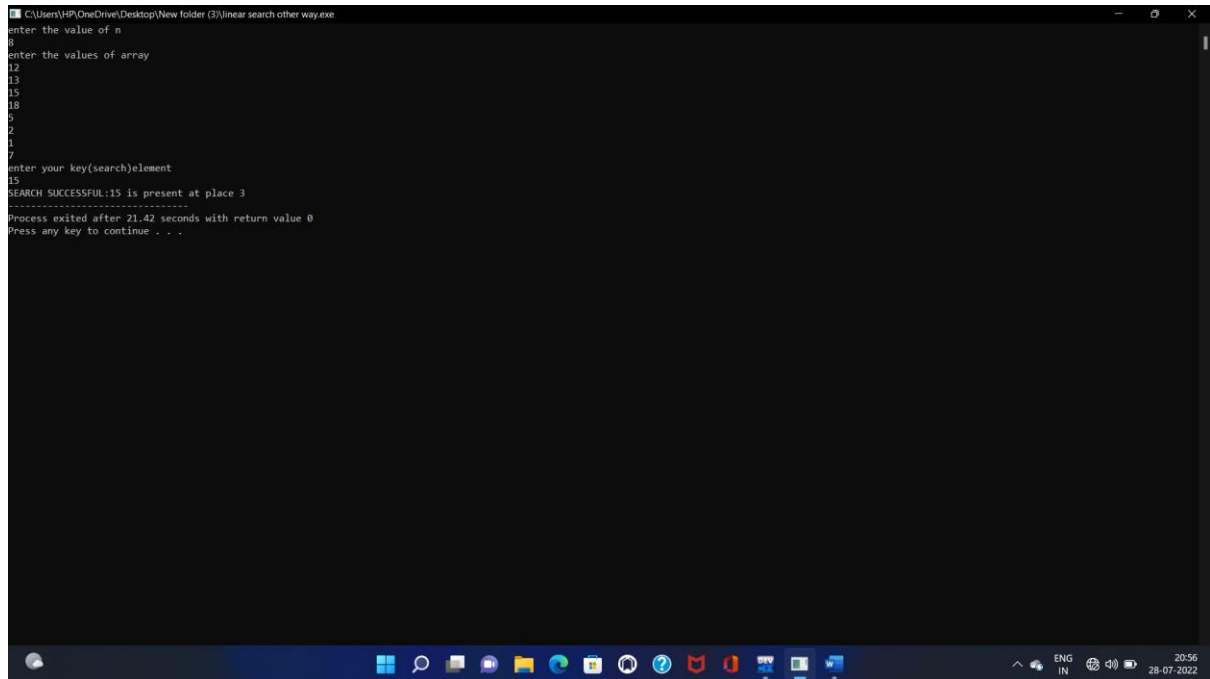
```
printf("SEARCH UNSUCCESSFUL:element not found\n");

else

printf("SEARCH SUCCESSFUL:%d is present at place %d",key,(location+1));

return 0;

}
```



The screenshot shows a Windows command prompt window titled "C:\Users\HP\OneDrive\Desktop\New folder (3)\linear search other way.exe". The program prompts the user to enter the value of n (8), the values of the array (12, 13, 15, 18, 5, 2, 1, 7), and the key to search (15). It then displays the output: "SEARCH SUCCESSFUL:15 is present at place 3". Below this, it shows "Process exited after 21.42 seconds with return value 0" and "Press any key to continue . . .". The Windows taskbar at the bottom shows the time as 20:56 on 28-07-2022.

```
C:\Users\HP\OneDrive\Desktop\New folder (3)\linear search other way.exe
enter the value of n
8
enter the values of array
12
13
15
18
5
2
1
7
enter your key(search)element
15
SEARCH SUCCESSFUL:15 is present at place 3
.....
Process exited after 21.42 seconds with return value 0
Press any key to continue . . .
```