

8. Write a C program to search a number using Linear Search Method.

```
#include <stdio.h>

int main() {
    int arr[100], n, i, key, found = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);

    printf("Enter %d elements:\n", n);
    for(i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    printf("Enter number to search: ");
    scanf("%d", &key);

    for(i = 0; i < n; i++) {
        if(arr[i] == key) {
            printf("Element %d found at position %d.\n", key, i + 1);
            found = 1;
            break;
        }
    }

    if(!found) {
        printf("Element %d not found in the array.\n", key);
    }

    return 0;}
```

OUTPUT :

```
C:\Users\saire\OneDrive\Desk  X  +  v
Enter number of elements: 5
Enter 5 elements:
1 2 3 4 5
Enter number to search: 6
Element 6 not found in the array.

-----
Process exited after 11.9 seconds with return value 0
Press any key to continue . . .
```