

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

```
int linearSearch(int arr[], int n, int key) {  
    for (int i = 0; i < n; i++) {  
        if (arr[i] == key) {  
            return i; // Return the index if the key is found  
        }  
    }  
    return -1; // Return -1 if the key is not found  
}
```

```
int main() {  
    int arr[] = {10, 20, 30, 40, 50};  
    int n = sizeof(arr) / sizeof(arr[0]);  
    int key = 30;  
    int result = linearSearch(arr, n, key);  
  
    if (result != -1) {  
        printf("Element found at index: %d", result);  
    } else {  
        printf("Element not found");  
    }  
  
    return 0;  
}
```