```
#include <stdio.h>
#define MAX 20
int hashTable[MAX];
int insert(int key, int size) {
    int idx = key % size, start = idx;
    while (hashTable[idx] != -1) {
        idx = (idx + 1) % size;
        if (idx == start) return -1;
    }
    hashTable[idx] = key;
    return idx;
}
int search(int key, int size) {
    int idx = key % size, start = idx;
    while (hashTable[idx] != -1) {
        if (hashTable[idx] == key) return idx;
        idx = (idx + 1) % size;
        if (idx == start) break;
    }
    return -1;
}
int main() {
    int size, n, key, i;
    printf("Enter hash table size: ");
    scanf("%d", &size);
    for(i=0;i<size;i++) hashTable[i]=-1;
```

```
    printf("Enter number of elements: ");
    scanf("%d",&n);
    printf("Enter elements:\n");
    for(i=0;i<n;i++) {
        scanf("%d",&key);
        insert(key,size);
    }
    printf("Hash Table:\n");
    for(i=0;i<size;i++)
        printf("%d -> %d\n",i,hashTable[i]);
    printf("Enter element to search: ");
    scanf("%d",&key);
    int pos = search(key,size);
    if(pos!=-1) printf("Element found at index %d\n",pos);
    else printf("Element not found!\n");
    return 0;
}
```

Output:

```
Enter hash table size: 10
Enter number of elements: 5
Enter elements:
1 2 3 4 5
Hash Table:
0 -> -1
1 -> 1
2 -> 2
3 -> 3
4 -> 4
5 -> 5
6 -> -1
7 -> -1
8 -> -1
```

```
9 -> -1
Enter element to search: 1
Element found at index 1


=== Code Execution Successful ===
```