**Linear Search**

**Algorithm**

**Linear Search (A, Key)**

**for(i=0;i<n;i++){**

**{ if a[i]==key**

**return i**

**}**

**return -1**

**}**

**Program**

*// C code to linearly search x in arr[].*

#include *<stdio.h>*

int search(int arr[], int N, int x)

{

**for** (int i = 0; i < N; i++)

**if** (arr[i] == x)

**return** i;

**return** -1;

}

*// Driver code*

int main(void)

{

int arr[] = { 2, 3, 4, 10, 40 };

int x = 10;

int N = **sizeof**(arr) / **sizeof**(arr[0]);

*// Function call*

int result = search(arr, N, x);

(result == -1)

? printf("Element is not present in array")

: printf("Element is present at index %d", result);

**return** 0;

}