1. Write a C program to search a number using Linear Search method.

#include <stdio.h>

int linearSearch(int a[], int n, int val) {

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

{

if (a[i] == val)

return i+1;

}

return -1;

}

int main() {

int a[] = {70, 40, 30, 11, 57, 41, 25, 14, 52};

int val = 41;

int n = sizeof(a) / sizeof(a[0]);

int res = linearSearch(a, n, val);

printf("The elements of the array are - ");

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

printf("%d ", a[i]);

printf("\nElement to be searched is - %d", val);

if (res == -1)

printf("\nElement is not present in the array");

else

printf("\nElement is present at %d position of array", res);

return0;

}