Search Operation → We can search an element from the array based on its value or its index.

Algorithm:- Let us consider LA is a linear array with N elements and K is a positive integer such that K <= N.

The algorithm to search an element ITEM using sequential search :-

1. Start
2. Set J = 0
3. Repeat steps 4 and 5 while J < N
4. If LA[J] is equal ITEM THEN GOTO step 6
5. Set J = J + 1
6. Print J, ITEM
7. Stop

Programmatically, it can be represented as:-

```
#include <stdio.h>
 void main() {
  int LA[ ] = {11, 13, 15, 17, 18};
  int item = 15, n = 5;
  int i = 0, j = 0;
printf("The original array elements are :\n");
 for(i = 0; i < n; i++) {
   printf(" LA[%d] = %d \n", i, LA[i]);
 }
```

```
while(j < n) {
if( LA[j] == item) {
        break;
    }
  j = j + 1;
}
printf("Found element : %d at position : %d \n",
                        item, j+1);
getch();
}
```

On Compiling & executing, the output will be :-

The original array elements are :

LA [0] = 11
LA [1] = 13
LA [2] = 15
LA [3] = 17
LA [4] = 18

Found element 15 at position 3.