**LINEAR SEARCH ALGORITHM**

Step 1: START

Step 2: Get input from user for number of elements they want to enter

Step 3: Create an empty list called shopping\_list

Step 4: Using for loop, loop through all the elements entered by the user

For i in range(n):

element= input()

shopping\_list.append(element)

END of for loop

Step 5 : Get input from the user for the element they want to search from the given list

Step 6: define a function called linearsearch then using for loop iterate through each and every elements in the list.

Using IF statement check whether the entered element by the user is there in the list

def linear\_search(shopping\_list, element):

    k = len(shopping\_list)

    for x in range(k):

        if element == shopping\_list[x]:

            print(element, "found at index number =", x)

            break

    else:

        print(element, "not found")

END of IF Statement

END of FOR Loop

Step 7: END