Linear Search

Note : Because here we are discussing about Searching.

Linear Search : (Not an application of DAC)

input : An array of n elements and what element "x" we want to search in an array

output : Position of an element x if it is found and if it is not present in the array then our function will return -1

n -> number of elements in an array

```
def LinearSearch(arr, x):    #arr is a sequence of data ,x is a find element
        for i in range(arr):   # O(n)
                if (arr[i] == x):
                        print(i)
        return -1
```

Discussion about the Best case(anything which is close to starting element of an array), Worst case(close to last element in an array) and average case time complexity

Best Case : O(1)

Worst Case : O(n)

Average Case : O(n)