

Linear Search

linear search algorithm searches for an element in the dataset from the beginning to the end. The search is terminated once the target element is found.

Time Complexity

Best-case : $O(1)$

target is found in the first position.

Worst-case : $O(n)$

target is either found in the end of the list or not found in the list.

```
int linearSearch(int[] array, int target)
{
    for(int i=0;i<array.length;i++)
    {
        if(array[i]==target)
        {
            return i;
        }
    }
    return -1;
}
```