Linear Search

A simple approach is to do linear search

- Start from the leftmost element of arr[] and one by one compare x with each element of arr[]
- If x matches with an element, return the index
- If x doesn't match with any of elements, return -1

```java
public static int search(int arr[], int x)
{
    int n = arr.length;
    for(int i = 0; i < n; i++)
    {
        if(arr[i] == x)
            return i;
    }
    return -1;
}
```

The time complexity of above algorithm is O(n).

Linear search is rarely used practically because other search algorithms such as the *binary search* algorithm and *hash tables* allow significantly faster searching comparison to Linear search.