Linear Search: (13)

* It starts search for the element from the start until it reaches it.

* Time Complexity:

Best: O(1) // constant

Worst: O(n) // Size of Array. (Linear)

* To search the array.

```
static int linearSearch(int[] arr, int target) {
    if (arr.length == 0) {
        return -1;
    }
    for(int index = 0; index < arr.length; index++) {
        int element = arr[i];
        if (element == target) {
            return index;
        }
    }
    return -1; // if no element found
}
```

Note:-

* For array length it is arr.length
* For String length it is str.length()
* If you want to return array from function

return new int[]{ }; because you want to declare array here.

* Like this you can't also do in ~~int~~ declaring a variable but its not necessary

```
int[] arr = new arr[]{
        . . . . };  // Not necessary

int [] arr = {      };  // true also.
```

* Minimum Value of integer is -2147483648.

Practice:

1295. Find Numbers with Even Number of Digits (Leetcode)

57:22

Note: To print No. of digit in single step

```
int digit = (int)(Math.log10(num) + 1)
```

Practice:

1672. Richest customer wealth.