

```
// JavaScript file for question 2
```

```
function countTimes(array, item) {  
    n = array.length;  
    var count = 0;  
    for (var i = 0; i < n; i++) {  
        if (array[i] === item) {  
            count = count + 1; //MISSING;  
            //count++;  
        }  
    }  
    return count;  
}
```

```
function newCountTimes(array, item) {  
    var l = 0;  
    var r = array.length - 1;  
    var m;  
    var count = 0;  
    var i;  
    while (l <= r) {  
        m = Math.ceil(l + ((r - l)/2));  
        //console.log(m + "mid");  
        if (array[m] === item) {  
            count = 0;  
            i = 0;  
            while (array[m + i] === item) {  
                count++;  
                i++;  
            }  
            return count;  
        } else if (array[m] > item) {  
            r = m - 1;  
            //console.log(r + "right");  
        } else {  
            l = m + 1;  
            //console.log(l + "left");  
        }  
    }  
    return count;  
}
```

```
// All the commented out things are things I was using to test
```

```
//var array = [0,1,3,3,4,5,5,6,7];
```

```
//console.log(newCountTimes(array,5));
```

```
//var l = 5;
```

```
//var r = 8;
```

```
//var m = Math.floor((l + r)/2);
```

```
//var m = Math . ceil (l + ((r - l)/2));
```

```
//console.log(m);
```