

Arrays

Find the average of the grades:

```
1 var a = [ 93, 97, 82 ];
2
3 var sum = 0;
4 var count = 0;
5
6 for (var i=0; i<a.length; i++) {
7 //1st run: i == 0
8 //1st run: sum == 0, count == 1
9 //2nd run: i == 1
10 //3rd run: i == 2
11     sum=sum + a[i];
12 //1st run: sum == 93, count == 0
13 //2nd run: sum == 93+97=190, count ==1
14 //3rd run: sum == 190+82 =272, count == 2
15     count = count+1;
16 //1st run:sum == 93, count == 1
17 //2nd run:sum == 190, count == 2
18 //3rd run: sum == 272, count == 3
19 }
20
21 var avg = sum/count;
22 console.log(avg);
23
```

Run Session

```
Native Chrome JavaScript.
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90.66666666666667
```

Suppose there is a sale where items over \$20.00 are 30% off. What is the total, after-sale price of the order?

```
1 var items = [ 10.50, 22.30, 82.13, 4.32, 53.21 ];
2 var total =0;
3
4 //Over $20.00 -> 30% off
5
6 for (var i = 0; i<items.length;i++) {
7     var item = items[i];
8     if (item > 20) {
9         total = total + ( item*0.7 );
10    }
11    else {
12        total = total + item;
13    }
14 }
15 console.log("Total: ");
16 console.log(total);
```

Run Session

```
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Total:
125.16799999999999
```

Conditionals

```
if (a >= 20 && a <= 50) {
    ...
}
```

AND

It means $(20 \leq a \leq 50)$



Count how many vowels in “Illinois”

```
1 var s = "Illinois";
2 var vowels = 0;
3
4 for(var i=0; i<s.length; i++) {
5     var c = s[i];
6     if(s[i]=='a'||s[i]=='e'||s[i]=='i'||s[i]
7     =='o'||s[i]=='u') {
8         vowels = vowels + 1;
9     }
10    if(s[i]=='A'||s[i]=='E'||s[i]=='I'||s[i]
11    =='O'||s[i]=='U') {
12        vowels = vowels + 1;
13    }
14 }
15 console.log(vowels);
```

Run Session

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