

## Assignment 4

Make sure to test all your answers in the console.

1. Write a function that takes as arguments an array `arr` and a function `g`, and returns the result of applying `g` to each element in the array and adding the resulting values. Do not use any array methods other than array indexing and array length.
2. Write a function `makeAlternate` that takes no arguments, and when called returns a function. That returned function when called returns `true` one time, `false` the next time, then back to `true` and so on, alternating between `true` and `false`.

3. Write a function `makeCounter` that is similar to the one we introduced in class, but it also accepts an argument `init`, and the counter it returns will start counting from `init` instead of 1. (So if `var a = makeCounter(10)`, then `a()` would equal 10 the first time and 11 the second time and so on from there).

4. Consider the following code:

```
var a = 2;  
function foo(a) { a = 6; }  
foo();  
a;
```

What is the value of the variable `a` from the last line? How do you explain that?