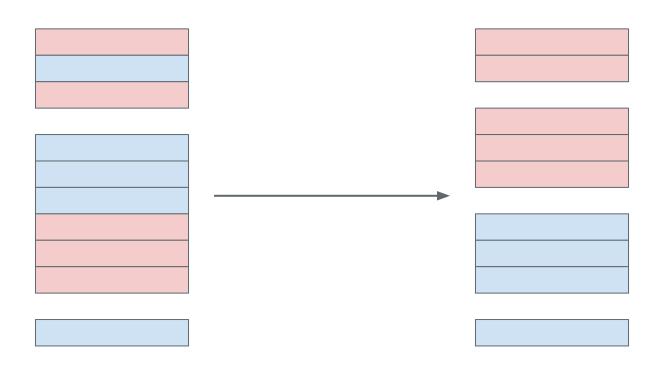


Marmalum

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Designating Frontend v Backend



```
frontend javascript
  "(id, str) => { document.getElementById(id).innerHTML = str }"
  as set(id: String, val: String): Void
frontend pageload(): Void {
  let x: Number = get_and_increment();
  set("counter", x);
backend counter: Number = 0;
backend get_and_increment(): Number {
  counter = counter + 1;
  print(counter);
  return counter;
```

How do I return the response from an asynchronous call?



I have a function foo which makes an Ajax request. How can I return the response from foo?

3593

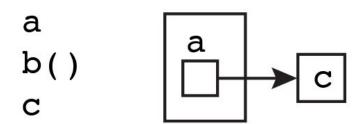
I tried to return the value from the success callback as well as assigning the response to a local variable inside the function and return that one, but none of those ways actually return the response.



1770

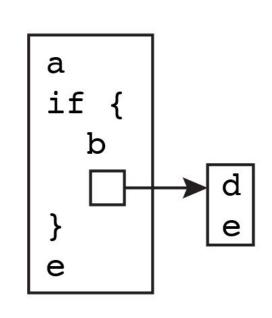
```
function foo() {
    var result;
    $.ajax({
        url: '...',
        success: function(response) {
            result = response;
            // return response; // <- I tried that one as well
    });
    return result;
var result = foo(); // It always ends up being `undefined`.
```

Statement Cutting



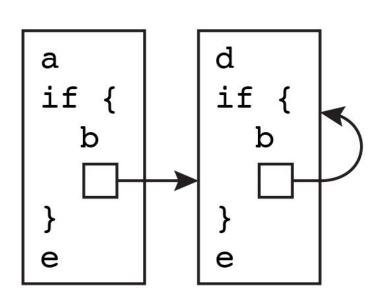
If Statement Cutting

```
a
if {
   b
   c()
   d
}
```



While Loop Cutting

```
a
while {
   b
   c()
   d
}
```



Generation

```
frontend get_id(user): Number{
  return get_user_data(user).id;
}
```

```
function get_id(user) {
  function get_id_0(result) {
    return result.id;
  };
  return backend("get_user_data", get_id_0)(user);
}
```

Demo

```
frontend javascript
  "(id, str) => { document.getElementById(id).innerHTML = str }"
  as set(id: String, val: String): Void
frontend pageload(): Void {
  let x: Number = get_and_increment();
  set("counter", x);
backend counter: Number = 0;
backend get_and_increment(): Number {
  counter = counter + 1;
  print(counter);
  return counter;
```