

Lab 6

```
x = 1;
var a = 5;
var b = 10;
var c = function(a, b, c) {
    document.write(x);
    document.write(a);
    var f = function(a, b, c) {
        b = a;
        document.write(b);
        b = c;
        var x = 5;
    }
    f(a,b,c);
    document.write(b);
    var x = 10;
}
c(8,9,10);
document.write(b);
document.write(x);
}
```

Code 1

1. It could be: Undefined1889101
2. Lexical environment diagram:

Global EC: Creation LE {a : undefined, b : undefined, c: undefined } tdz{}

Global EC: Execution LE{x:1, a:5, b:10, c:fn}

Outer: null ;

C FEC Creation LE {arguments{0:8, 1:9, 2: 10, length: 3}, f:undefined, x:undefined, a:8, b:9, c:10} tdz{}

C FEC Execution LE{ **write(x=undefined)**, **write (a=8)**, f:fn}

Outer: global;

F FEC Creation LE{arguments{0: 8, 1:9, 2: 10, length: 3}, x:undefined, a:8, b:9, c:10} tdz{}

F FEC Execution LE{b:8, **write (b=8)**, b:~~8~~10, x:5};

Outer: C;

C FEC Creation LE {arguments{0:8, 1:9, 2: 10, length: 3}, f:undefined, x:undefined, a:8, b:9, c:10} tdz{}

C FEC Execution LE{print(x=undefined,) print(a=8), f:fn, **write(b=9)**, x:10}

Outer: global;

Global EC: Creation LE {a : undefined, b : undefined, c: undefined } tdz{}

Global EC: Execution LE{x:1, a:5, b:10, c:fn, **write(b=10)**, **write(x=1)**}

Outer: null ;

```
var x = 9;
function myFunction() {
    return x * x;
}
document.write(myFunction());
x = 5;
document.write(myFunction());
```

Code 2

1. It could be: 8125
2. Lexical environment diagram:

Global EC: Creation LE{x: undefined, myFunction:fn} tdz{}

Global EC: Execution LE{x: 9}}

Outer: null

myFunction FEC: Creation LE{arguments{length:0}}

myFunction FEC: Execution LE{}

Outer: Global

Global EC: Creation LE{x: undefined, myFunction:fn } tdz{}

Global EC: Execution LE{x: 9}, **write(x*x=81), x:9 5**

Outer: null

myFunction FEC: Creation LE{arguments{length:0}}

myFunction FEC: Execution LE{}

Outer: Global

Global EC: Creation LE{x: undefined, myFunction:fn } tdz{}

Global EC: Execution LE{x: 9}, write(x*x=81), x:9 5, **write(x*x=25)**

Outer: null

```
var foo = 1;
function bar() {
    if (!foo) {
        var foo = 10;
    }
    alert(foo);
}
bar();
```

Code 3

1. It could be: 10
2. Lexical environment diagram:

Global EC: Creation LE{foo: undefined, bar:fn} tdz{}

Global EC: Execution LE{foo: 1}

Outer: null;

bar FEC: Creation LE{arguments{length:0}, foo: undefined} tdz{}

bar FEC: Execution LE{foo: 10, alert(foo=10)}