

# LAB1

**EXERCISE 1.-** Write the necessary Node script to make this code work for all arrays:

```
[1,2,3,4,5,6,7,8].even(); // [2,4,6,8] [1,2,3,4,5,6,7,8].odd(); // [1,3,5,7]
```

**Test your code in Node.JS CLI**

```
function getEven() {  
  return this.filter(n => n % 2 == 0);  
}
```

```
function getOdd() {  
  return this.filter(n => n % 2 !== 0);  
}
```

```
Array.prototype.even = getEven;
```

```
Array.prototype.odd = getOdd;
```

```
var a = [1,2,3,4,5,6,7,8];
```

```
console.log(a.even());
```

```
console.log(a.odd());
```

**EXERCISE 2.-**

```
function slow(callback) {  
  if (Math.random() > 0.5) {  
    return callback("Error", null)  
  }  
  return callback(null, { id: 12345 })  
}
```

```
function exec(fn) {
```

```
  let obj = {};
```

```
  fn(function (err, data) {
```

```

        obj.done = function (cb) {
            if (err === null) {
                cb(data);
            }
            return this;
        }
        obj.fail = function (cb) {
            if (err !== null) {
                cb(err);
            }
            return this;
        }
    });
    return obj;
}

```

### EXERCISE 3

**Explain why do we want sometimes to use `setImmediate` instead of using `setTimeout`?**

`setImmediate` execute after I/O events, so we can be sure all the connections I/O are close.  
`setTimeout` execute in the timer phase, that means before I/O callbacks

**Explain the difference between `process.nextTick` and `setImmediate`?**

Basically `process.nextTick` execute before `setImmediate`

**Name 10 global modules/methods available in Node environment.**

SetTimeout	setImmediate
Process.nextTick	Exports
require	Buffer
path	loaded
filename	id