```javascript
function Product(name, price) {
    this.name = name;
    this.price = price;
}


var p = new Product("iPhone 15", 89000.00);
```
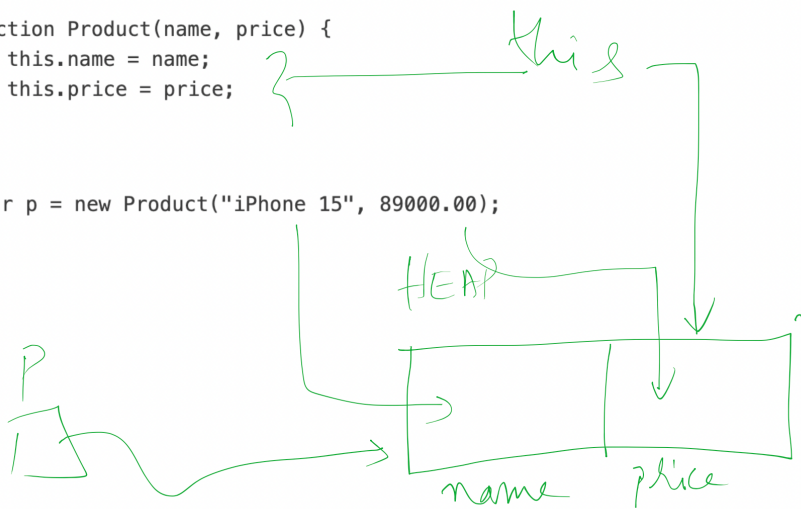
(annotations: this, HEAP, p, name, price)

```javascript
function forEach(elems, action) {
    for(var i = 0; i < elems.length; i++) {
        action(elems[i]);
    }
}

function filter(elems, predicate) {
    let result = [];
    forEach(elems, function (elem) {
        if(predicate(elem)) {
            result.push(elem);
        }
    })

    return result;
}
```

```javascript
let products = [
    {"name": "iPhone 16", "price": 89000.00, "category": "mobile"},
    {"name": "Sony Bravia", "price": 235000.00, "category": "tv"},
    {"name": "Wacom", "price": 5200.00, "category": "computer"},
    {"name": "OnePlus 15", "price": 75000.00, "category": "mobile"},
    {"name": "LG OLED", "price": 125000.00, "category": "tv"},
    {"name": "Logitech Mouse", "price": 789.00, "category": "computer"}
];
```

```javascript
let mobiles = filter(products, function isMobile(p) {
    return p.category === 'mobile'
});
```

```javascript
function forEach(elems, action) {
    for(var i = 0; i < elems.length; i++) {
        action(elems[i]);
    }
}

function filter(elems, predicate) {
    let result = [];
    forEach(elems, function (elem) {
        if(predicate(elem)) {
            result.push(elem);
        }
    })

    return result;
}
```

```javascript
let nums = [5, 2, 6, 9, 8, 12, 3];

let evens = filter(nums, function isEven(e) {
    return e % 2 === 0;
})
```

(annotations: 5 | 2 | 6 | 9 | 8 ... 12 | 3 ; 2 6 8 12)

```javascript
function forEach(elems, action) {
    for(var i = 0; i < elems.length; i++) {
        action(elems[i]);
    }
}
```

```
let products = [
    {"name": "iPhone 16", "price": 89000.00, "category": "mobile"},
    {"name": "Sony Bravia", "price": 235000.00, "category": "tv"},
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    {"name": "LG OLED", "price": 125000.00, "category": "tv"},
    {"name": "Logitech Mouse", "price": 789.00, "category": "computer"}
];
```

```javascript
function map(elems, transformFn) {
    let result = [];
    forEach(elems, function (elem) {
        result.push(transformFn(elem));
    })
    return result;
}
```

```javascript
var names = map(products, function(p) {
    return p.name;
});
```

```javascript
console.log(names);
```

```
"iPhone 16", "price":
"Sony Bravia", "price
"Wacom", "price": 520
"OnePlus 15", "price'
"LG OLED", "price": 
"Logitech Mouse", "pr
```

```javascript
function forEach(elems, action) {
    for(var i = 0; i < elems.length; i++) {
        action(elems[i]);
    }
}
```

```
let products = [
    {"name": "iPhone 16", "price": 89000.00, "category": "mobile"},
    {"name": "Sony Bravia", "price": 235000.00, "category": "tv"},
    {"name": "Wacom", "price": 5200.00, "category": "computer"},
    {"name": "OnePlus 15", "price": 75000.00, "category": "mobile"},
    {"name": "LG OLED", "price": 125000.00, "category": "tv"},
    {"name": "Logitech Mouse", "price": 789.00, "category": "computer"}
];
```

```javascript
function map(elems, transformFn) {
    let result = [];
    forEach(elems, function (elem) {
        result.push(transformFn(elem));
    })
    return result;
}
```

```javascript
function toCard(product) {
    return `
        <div class="card">
            <div class="card-header">
                ${product.name}
            </div>
            <div class="card-body">
                ${product.price}
            <div>
        </div>
    `
}

var cards = map(products, toCard);
```

Product to Div