

1/25/2020

W2D6 Inheritance

CS472 Web Applications Programming

Implement the following in the IDE. You can send all the output to the console. Make some comment on the html page that the output is in the console.

Exercise 1:

Define a filter function on the String object. The function accepts an array of strings that specifies a list of banned words. The function returns the string after removing all the banned words.

Example:

```
console.log("This house is not nice!".filter('not'));
```

Output: "This house is nice!"

Exercise 2:

Write a BubbleSort algorithm on the Array object. Bubble sort is a simple sorting algorithm that works by repeatedly stepping through the list to be sorted,

Example:[6,4,0, 3,-2,1].bubbleSort();

Output : [-2, 0, 1, 3, 4, 6]

Exercise 3:

The last exercise for today comes from: <https://www.learn-js.org/en/Inheritance>

Create an object called Teacher derived from the Person class, and implement a method called teach which receives a string called subject, and prints out:

[teacher's name] is now teaching [subject]

Here is code for Person and an example of a Student function constructor. Write Mocha tests that verify the describe, learn, and teach methods work as expected for students and teachers.

```
var Person = function() {};  
  
Person.prototype.initialize = function(name, age)  
{  
  this.name = name;  
  this.age = age;  
}  
  
Person.prototype.describe = function()  
{
```

```
        return this.name + ", " + this.age + " years old.";
    }

    var Student = function() {};
    Student.prototype = new Person();

    Student.prototype.learn = function(subject)
    {
        console.log(this.name + " just learned " + subject);
    }

    var me = new Student();

    me.initialize("John", 25);
    me.learn("Inheritance");
```