Assignment

Task 1: Setting Up the Environment

In order to complete this assignment you need to have *Node.js* platform installed on your machine:

1) Install from here http://nodejs.org/

2) Please extract the contents of *Assignment.zip* to your local drive.

3) Open your command prompt as administrator (on windows: right click -> Run as administrator).

4) Run the following command to create the npm folder
in 'C:\Users\<username>\AppData\Roaming\npm'

- `cd C:/Users/<username>/AppData/Roaming/`
- `mkdir npm`

5) Navigate to your *Assignment* folder (it should contain the *package.json* file) and execute the following commands:

- `npm install`
- `npm install -g karma-cli`

You will notice that the *Assignment* folder contains two JavaScript files:

- *js/CalculatorService.js* - implements a simple service
- *test/CalculatorService.spec.js* - implements tests for that service

To run the tests, navigate to your *Assignment* folder (it should contain *karma.conf.js* file) and execute the following command:

- `karma start`

You should see 2 tests executed, with one of them failing.

Task 2: Calculator Service

Inside the *CalculatorService.js* file you should see the Object Constructor
Function *CalculatorService*.

The idea of this service is to implement a really simple calculator.

Using the constructor, assign the following methods to the object:

- *enterDigit(digit)* - *digit* is string, e.g. 'one'
- *enterOperation(operation)* - *operation* is one character, e.g. '+'
- *enterEquals()*
- *enterClear()* - full clear
- *getDisplay()* - returns current display as a string

These should be the only 'publicly accessible' properties!

Inside the constructor, create an object *digits* using Object Literal that contains pairs of number names and values.
Use this object to convert number names to values.

Please note that usage of the *eval()* function is not allowed for this task.

Task 3: Tests for Calculator Service

Inside the *CalculatorService.spec.js* file you should see tests for *Calculator Service*.

Using the *Jasmine* framework (http://jasmine.github.io/), try to come up with some good tests for your *Calculator Service*.
Try to cover as many scenarios as you can to make sure that your service does not have any bugs.

Example of one test method:

- *enter 'one'*
- *expect to display '1'*
- *enter 'two'*
- *expect to display '12'*
- *enter '+'*
- *expect to display '12'*
- *enter 'three'*
- *expect to display '3'*
- *enter equals*
- *expect to display '15'*

Submitting the assignment

When submitting your assignment please only include
the *CalculatorService.js* and *CalculatorService.spec.js* files in a zip file.