CM1015 Software Design and Development

JavaScript Tutorial 1

Before starting the tutorial make sure you have created a folder called tutorial1 or lab1, etc. and save all your answers in a text file. It is probably easiest to get the statement correct and then copy and paste into your saved file.

In all of the following, you can experiment by using an html file, the shell or the runner.

1. Write JavaScript code which will display the following:

    a)   Computing is great?
    b)   Alice says "Bob is here"
    c)   The folder to use is c:\home\files
    d)   RGU's new campus

2. Write a single instruction which will produce the following:

    ```
    X
    XX
    XXX
    XXXX
    XXXXX
    ```

    We will see later how to do this more efficiently

3. Write a single instruction using tab spaces which will produce something similar the following (the size of a tab space is browser dependent so you might have to experiment with the number of symbols to get a box shape):

    ```
    XXXXX
    X    X
    X    X
    X    X
    XXXXX
    ```

4. Try running the following lines of JavaScript and observing the output.

    ```
    alert("The answer is 2")
    alert("The answer is" + 2)
    alert("The answer is" + "2")
    alert("The answer is 2 " + 5)
    alert("The answer is " + 2 + 5)
    alert("The answer is " + (2 + 5))
    ```

    Can you work out what is happening in each case?

5. Write a program which will get ask a user for their name and output:

```
Hello <name>
Welcome to CM1015
We hope you enjoy the course
```

6. Write a JavaScript statement which will prompt a user for a number and output one more than that number, e.g. if you entered 2 the alert would show 3. Can you get this to work? Can you think about what type of result the `prompt()` method returns?

7. Write a JavaScript statement which will prompt for the names of two people and output the rhyme `<first person> and <second person> sitting in a tree, K.I.S.S.I.N.G.`

Extra work.

Investigate how to convert your input into upper case. To do this you need to follow the string with the `command .toUpperCase()` for example try `"Hello".toUpperCase()`. Note that you need to use the dot (.) and the brackets.

Try the similar commands

```
.toLowerCase()
.length
.replace("lo", "p")
```

Look up other operations which can be carried out on strings.

Useful websites are:

> http://www.w3schools.com/js/
> http://www.codecademy.com/en/tracks/javascript
> http://www.tizag.com/javascriptT/