

Exercise Sheet 1

- 1) What will be the value of the variable *hello* after the current assignments?

```
4 var hello = 5;  
5 var bye = 10;  
6  
7 hello = bye/hello;
```

- 2) Create a profile of yourself where you use variables to hold information about you such as your name or the name of your dog. Try to choose the right name for these variables. Hint: you can have variable that hold one character using the single 'quotation' marks around the character, or full words or sentences using double "quotation" marks.
- 3) Write a program to calculate the square and the cube of a variable *number*. You should be able to only change the value of the variable number for square and cube to hold the right value.
- 4) Read about the difference between *Strings*, *chars*, *numbers* and other types of variables in other programming languages such as C, C++ or Java. What do you notice? What is the difference between these languages and JavaScript in terms of variable declaration?
- 5) Configure the variables *sentence1* and *sentence2*. So that *sentence1* is equal to "dogs and cats" and *sentence2* equals "cats and dogs". Hint: you can add strings together. Use these variables only:

```
4 var a = "dogs";  
5 var b = "cats";  
6 var c = "and";
```

Turtle JS

Answers:

1) Hello = 2;

2)

```
4 var myName = "Jack";
5 var myDateOfBirth = "10th of June";
6 var age = 14;
7 var favoriteLetter = 'b';
8 var nameOfDog = "Alberto";
```

3)

```
4 var number = 5; //or any other value
5
6 var square = number * number;
7 var cube = square * number;
```

4) In JavaScript, you can just use *var* to declare a variable while in Java for example you have to use *int* for a whole number, *float* for a decimal number or *string* for a word/sentence. In essence JavaScript is much nicer for variable declaration.

5)

```
4 var sentence1 = a + " " + c + " " + b;
5 var sentence2 = b + " " + c + " " + a;
```