**CM1605 Web Technology**

**Tutorial 6**

The aim of this tutorial is to make use of JavaScript functions, loops and understand the concept of variable scope.

This is an individual exercise. You may use any text editor (Notepad, Notepad ++) to create the HTML pages and any Browser application (chrome, IE, firefox etc) to run the web pages.

Note: **Use proper indentation, comments and proper naming conventions for variable naming where applicable**.

**Task1**

1. Open Tut5.html
2. Consider generating the questions and associated display within a loop. However, you will need to experiment with how you will generate the different operators (+, -, \*) within the loop.

**Task2**

You are asked to create a game called “Dinosaur Cave”

1. Define a function called “display\_intro();” that has no parameters and alert the user following introduction of the game.

“You are in the Kingdom of Dinosaurs. In front of you, you see two caves. In one cave, the dragon is friendly and will share his treasure with you. The other dragon is hungry and will eat you on sight.”

1. Define a function called “choose\_cave” that has no parameters. This function will ask the player if they want to enter cave 1 or 2 and returns a valid response.

(Hint: Make use of repetition control -until user inputs 1 or 2, it should prompt the user to enter cave number)

1. Create a function called check\_cave that has a parameter called chosen\_cave (chosen by the player using “choose\_cave();” ). Add the following code to the function.

alert(“You approach the cave...”);

alert(“A large dragon jumps out in front of you!” ') ;

alert(“He opens his jaws and...”);

1. Add the following code to the check-cave function. The Math.random() function will return either 1 or 2 and store this in a variable called friendlyCave to indicate the cave with the friendly dragon.

friendlyCave = Math.floor(Math.random()\*2 + 1);

1. Create a condition to check if the player wins or loses.

* The player’s chosen cave (stored in chosen\_cave) is equal to the randomly generated value (stored in friendlyCave). alert ‘Gives you his treasure!’
* Otherwise, alert ‘Gobbles you down!’

1. Calling functions in your program should be in following order

display\_intro();

cave\_number = choose\_cave();

check\_cave(cave\_number();

1. Add the feature to check if the user wants to play again (Hint: Use “do while loop” to call the functions of the program until player enters ‘Y’ or ‘y’ ).

Sample Screen dumps













