

# Exercise Week 6 – JavaScript

---

## Using functions in JavaScript

---

**Part 1:** Create a web page that displays an alert using a function.

Code to create a function:

```
function myFunction() {  
    alert("Hello, this alert is from a function");  
}
```

To call (or activate) the function, you will also need to include the following:

```
myFunction();
```

**Part 2:** Amend your page so that the function only runs when a button is pressed

The HTML code (to be placed inside the body tags of your page) to create a button is as follows:

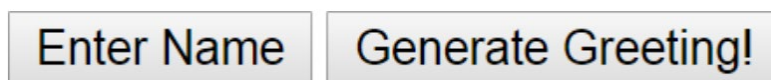
```
<button onclick="myFunction()">Click here for a pop up alert</button>
```

Note the use of the *onclick* attribute in the code above. This will cause the function “myFunction()” to run when the button is clicked.

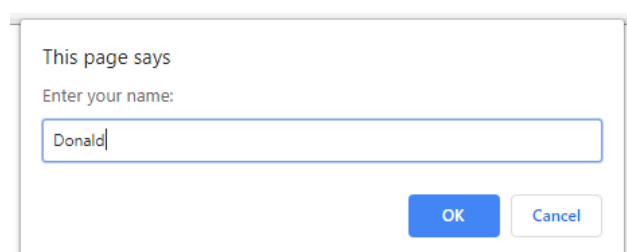
## Input and output in JavaScript

---

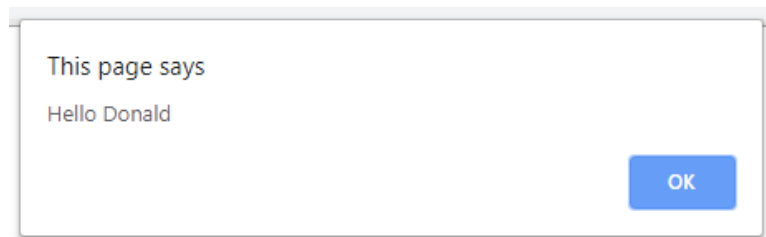
**Part 1:** Create a web page that has 2 buttons as shown below. Clicking the “enter name” button will *prompt* the user for an input using a function. Clicking the “Generate Greeting” will display as an alert.



Clicking the “Enter Name” button will activate a function that results in the following (Javascript *prompt*):



Clicking the “Generate Greeting” button will activate a function that results in the following (Javascript *alert*):



*Note: The output shown above is from Chrome, if you use a different browser then the output may look slightly different.*

## Decisions and Loops in JavaScript

### Guessing Game 1 to 10

---

Write a JavaScript program where the program generates a random number between 1 to 10 (see code snippet below).

How to generate a random number between 1 to **10** in JavaScript:

```
var num = Math.ceil(Math.random() * 10);
```

The user is then *prompted* to input a number. *If* the number the user inputs matches with the random number, the program will display a message "Good Guess", otherwise (*else*) display a message "Sorry, wrong number".

### Guessing Game 1 to 30

---

Write a JavaScript Guessing Game program where the program chooses a random number between 1 to 30. The user is then *prompted* to guess the random number. The user has six attempts to guess the right number. If the user has not guessed the correct number after 6 attempts, the game ends and the number the program generated is displayed.

## Guessing Game 1 to 100

---

Write a JavaScript Guessing Game program where the program chooses a random number between 1 to 100. The user is then *prompted* to guess the number the program chose. The user has six attempts to guess the right number. After each attempt, if the number is incorrect, the program will display “Guess too high” or “Guess too low” depending on the user input. If the user has not guessed the correct number after 6 attempts, the game ends and the number the program generated is displayed.