Further use of conditional execution

In the fifth video, Steve extends the use of conditional execution – more use of the 'if' statement – and explain why, if you insert age 14 into the published page from the previous activity, you get 'undefined' as a message. This is clearly a bug and in this video he explains what to do to make sure any age entered in the page comes up with a sensible response.

Step 1: Setting the scene for this activity (video start to 1.08)

Steve uses the code that was created for the previous activity and hopefully you still have that saved safely somewhere! Open up that document. If you haven't already, try entering age 14 into the published page to see what response you get – hopefully you will also get an 'undefined' message.

Step 2: Initialising the message variable (video 1.09 – 02.55)

Watch the video up to 2.55 to see how Steve adds some additional code to the message variable within the function tags to make sure that anyone between the ages of 5 and 16 now receives a sensible message.

Add this syntax to your code. It should look like the screenshot on the right.

You can take a screenshot of this code to add to your Student Log.

```
1  <html>
2  <head>
3  <script>
4  function checkAge()
5  {
6      var age;
7      var message = "You should still be at school";
8
9      age = parseInt(document.getElementById("age").value);
10     if (age > 17)
11     message = "Super! You can go to the disco!";
12     if (age < 5)
13     message = "You're too young to go to school!";
14     if (age == 17)
15     message = "Super! You can learn to drive!";
16
17     document.getElementById("messageArea").innerHTML = message
18 }
19 </script>
20 </head>
21 <body>
22 How old are you?
23 <input type="text" id="age"/><br>
24 <input type="button" value="Check Age" onclick="checkAge()"/><br>
25 <p id="messageArea"></p>
26 </body>
27 </html>
```

Step 3: Using less/more than and equal to in the conditionals (Video 02.56 – 03.44)

Steve now explains how to change the information in the conditions to bring together the more than, or less than, and equals by adding an equals sign immediately after the symbols for more than (>) and less than (<). This means that you can specify the age as four or younger, or 18 and older easily. Watch the video and then add the additional equals signs to your code. It should look like the screenshot on the right.

```html
<html>
<head>
<script>
function checkAge()
{
    var age;
    var message = "You should still be at school";

    age = parseInt(document.getElementById("age").value);
    if (age >= 18)
    message = "Super! You can go to the disco!";
    if (age <= 4)
    message = "You're too young to go to school!";
    if (age == 17)
    message = "Super! You can learn to drive!";

    document.getElementById("messageArea").innerHTML = message
}
</script>
</head>
<body>
How old are you?
<input type="text" id="age"/><br>
<input type="button" value="Check Age" onclick="checkAge()"/><br>
<p id="messageArea"></p>
</body>
</html>
```

Step 4: Adding another conditional for ages 13-18 years (video 03.45 – 04.32)

Steve shows you in the next video clip how you can bring conditionals together – two in one statement – using 'and' which is actually written in code as **&&** - that is, two ampersands together (found by using the shift key and, usually, number 7 on your keyboard).

Here he uses the two conditionals of being 13 years and over, and 19 years and younger, which generates the message that 'you must be a teenager'. Add this new conditional to your code. It should look like the screenshot on the right.

```html
<html>
<head>
<script>
function checkAge()
{
    var age;
    var message = "You should still be at school";

    age = parseInt(document.getElementById("age").value);
    if (age >= 18)
    message = "Super! You can go to the disco!";
    if (age <= 4)
    message = "You're too young to go to school!";
    if (age == 17)
    message = "Super! You can learn to drive!";
    if (age >= 13 && age <=19)
    message = "You must be a teenager";

    document.getElementById("messageArea").innerHTML = message
}
</script>
</head>
<body>
How old are you?
<input type="text" id="age"/><br>
<input type="button" value="Check Age" onclick="checkAge()"/><br>
<p id="messageArea"></p>
</body>
```

Step 5: Publishing the page and testing it (video 4.33 to end)

Steve publishes his page and tests it with an age of 14, to generate the new message. Do the same with your code, test it with an age that is between 13 and 19 and take a screenshot of the code and the published page to insert into your Student Log.

Don't forget – if your code doesn't work the first time, debug it and try again!

How old are you? 15

Check Age

You must be a teenager