



**BACHELOR OF SCIENCE IN COMPUTING AND DIGITAL MEDIA
YEAR 2**

APPLIED DIGITAL MEDIA 1

ASSESSMENT 1 – JAVASCRIPT – GROUP B

ADDITIONAL INFORMATION PERTAINING TO THIS ASSESSMENT:

- The maximum duration of the assessment is **1 and a half hours**.
- You can use the Internet to access Moodle and other sources, but not for messaging/communications purposes.
- Network is monitored during assessment.
- No talking during the assessment.
- Phones must be put on silent and away for duration of the assessment.
- Once you have completed and submitted the assessment you are required to leave.

EXAMINATION FORMAT

**5 Questions in Total
Attempt All Questions
All questions carry equal marks**

TIME ALLOWED: 1.5 HOURS

Question 1

Use JavaScript to output the following text to a web page (see Figure 1):

“Tip: Hit the f12 key to access the browser dev tools”.

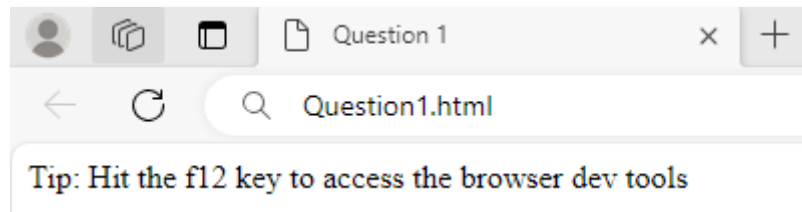


Figure 1 – Required Text output to web page.

Include comments in your HTML and JavaScript.

Complete all the tasks outlined in two files – Question1.html and Question1.js. Ensure that only JavaScript is placed in the Question1.js file and have Question1.html call the JavaScript file from within the HTML file.

Question 2

Use JavaScript to calculate the result of dividing the number 30.8 by the number 4. Each of these values should be assigned to a variable (i.e., you will need variables for 30.8, 4, and the result). Use the variable names concatenated with strings for your output. Output should be displayed using an alert (see Figure 2).

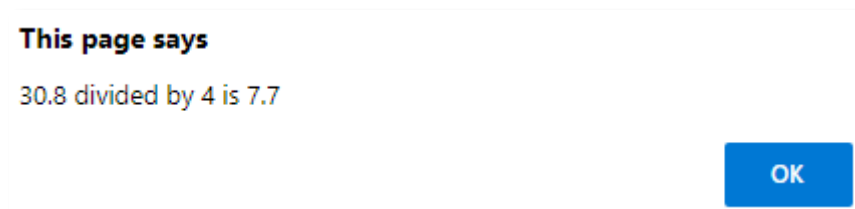


Figure 2 – Values, arithmetic and result output using an alert.

Include comments in your HTML and JavaScript.

Complete all the tasks outlined in two files – Question2.html and Question2.js. Ensure that only JavaScript is placed in the Question2.js file and have Question2.html call the JavaScript file from within the HTML file.

Question 3

Create a JavaScript program which prompts the user to enter two numbers. Create two variables to store these two numbers: one, and two. Assign the value 3 to a third variable: three. Output to the web page the result of performing the following arithmetic:

$(\text{one} + \text{two}) * \text{three}$.

Refer to figure 3 below for example output.

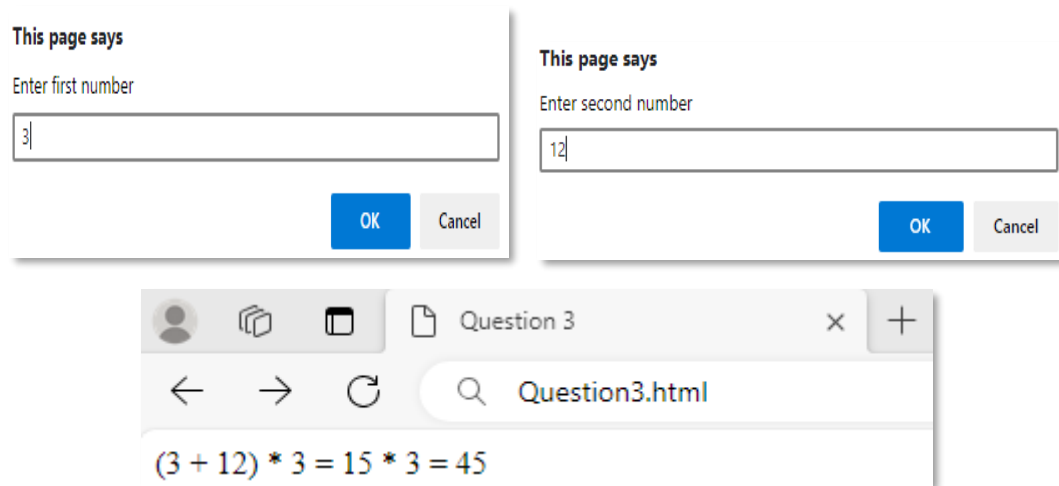


Figure 3 – Prompts, arithmetic and result output to web page.

Include comments in your HTML and JavaScript.

Complete all the tasks outlined in two files – Question3.html and Question3.js. Ensure that only JavaScript is placed in the Question3.js file and have Question3.html call the JavaScript file from within the HTML file.

Question 4

A fine of 100 euro exists for some violation. Write a JavaScript program which prompts a user to enter the number of days the fine is overdue by. For each day the fine is overdue by there is a cost of 5 euro per day. Output the total cost based on the fine and penalty incurred using an alert (see figure 4).

The figure shows two sequential browser alert dialog boxes. The first dialog box has a title bar that says "This page says". Inside, it says "Please enter number of days fine is overdue". There is a text input field containing the number "5". At the bottom right, there are two buttons: a blue "OK" button and a grey "Cancel" button. The second dialog box also has a title bar that says "This page says". Inside, it displays three lines of text: "Fine: 100", "Days Overdue: 5", and "Balance: 125". At the bottom right, there is a single blue "OK" button.

Figure 4 – Prompt and output using an alert.

Include comments in your HTML and JavaScript.

Complete all the tasks outlined in two files – Question4.html and Question4.js. Ensure that only JavaScript is placed in the Question4.js file and have Question4.html call the JavaScript file from within the HTML file.

Question 5

When it comes to salary, different tax bands are applied. Write a JavaScript program which prompts a user to input their gross salary. Calculate tax based on the following rules:

- First 30,000 is taxed at 25%
- Any earnings between 30,000 and 100,000 is taxed at 35%
- Any earnings above 100,000 thousand is taxed at 50%.

For example, if gross salary is 120,000, then 20,000 is taxed at 50%, 70,000 at 35%, and 30,000 at 25%.

Once total tax is calculated, output details of gross salary, tax due, and net salary (gross salary - tax).

Include comments in your HTML and JavaScript.

Complete all the tasks outlined in two files – Question5.html and Question5.js. Ensure that only JavaScript is placed in the Question5.js file and have Question5.html call the JavaScript file from within the HTML file.

Add all files from the assessment to a zip file and upload it using the link available in Assessment 1 section on the Module Moodle page.