## **Tutorial 03: Introduction to JavaScript**

- 1. Print out all odd numbers between 10 and 40. Write two solutions: one with a *while* loop and one with a *for* loop.
- 2. Write a function **printReverse()** that takes an array as an argument and prints out the elements in the array in reverse order on the browser's JavaScript console (don't actually reverse the array itself).

## Sample output in console:

```
printReverse([1,2,3,4]);
4
3
2
1
printReverse(["a","b"]);
"b"
"a"
```

3. Create an array of movie objects. Each movie should have a title, rating, and hasWatched properties. Iterate through the array and print out something that looks like:

You have watched "In Bruges" - 5 stars You have not seen "Frozen" - 4.5 stars You have watched "Mad Max Fury Road" - 5 stars You have not seen "Les Miserables" - 3.5 stars

## Question 4: Write an external JavaScript named "calculateCost.js" that calculate the cost of the purchasing coffee beans from JavaJam Coffee House.

- a. Create a folder called "javajam" to contain your JavaJam Coffee House website files. Copy all the files from your Tutorial 2's folder (javajam3) into the "javajam4" folder. You may organize files and folder structure in your project folder, e.g. create a 'scripts' folders to store all the JavaScript code used to add interactive functionality to your site.
- b. Launch a text editor, and open the **menu.html** file. To use an external script, put the name of the JavasScript file in the src (source) attribute of a <script> tag and add the link at the end of <body> section:

<script type="text/javascript" src="scripts/calculateCost.js"></script>

- c. The prices of the Coffee Beans per pack (500g) are as follows:
  - 1: Brazil Cerrado = RM42
  - 2: Vanguard Blend = RM42
  - 3: Organic Marcala = RM56
  - 4: Taster Pack Trio = RM 69
- d. Your 'calculateCost' JavaScript program needs to do the following tasks:
  - i. Ask users to enter the Coffee Bean ID number.

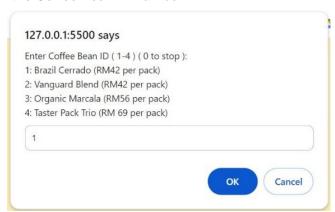


Figure 1: Menu Page - Ask for the Coffee Bean ID

ii. Ask users to enter the number of pack of coffee beans that the users want to purchase.

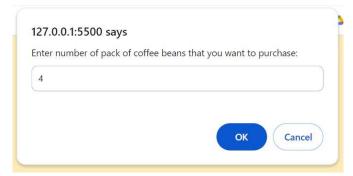


Figure 2: Menu Page - Ask for the number of pack of coffee bean that the user want to purchase.

iii. Write a JavaScript function named "calculateTotal" to calculate the total cost of coffee beans. This function should take two parameters (inputs from users – the Coffee Bean ID and number of pack). The function should display the calculated total cost of coffee beans using an alert message:

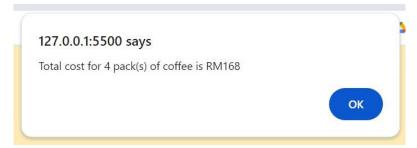


Figure 3: Menu Page - Display the calculated total cost of the coffee beans

iv. The program should display an error message when users enter a Coffee Bean ID not between 0 and 4

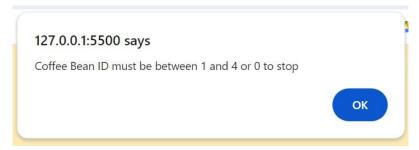


Figure 4: Menu Page - Display error message when the user enters a class ID not between 0 to 3.

## Hints:

- Convert the user input string to integer
- Use a loop to determine when the program should stop looping and display the final result. For example, allow users to enter 0 to stop.
- Write conditional statements to check whether the users enter a correct Coffee Bean ID
  and calculate the total cost for the coffee beans if users enter a correct Coffee Bean ID.