LAB 8 – JavaScript

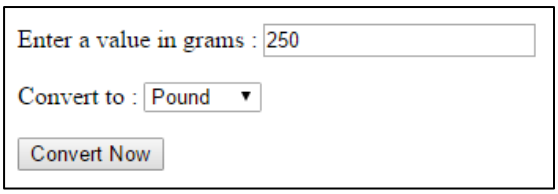
At the end of this lab, students should be able to:

- Insert JavaScript codes into a HTML document.
- Retrieve data from forms to be processed and display the required output.
- Incorporate JavaScript built-in functions as well as user defined functions to process data from forms.

Question 1

This JavaScript program will convert grams to either kilograms, pounds or ounce based on the user's choice. (Refer to HTML code given)

- When the button is clicked, it will trigger function *get_input()*.
- In function *get_input()*:
  - Get the gram value and the user's choice of conversion from the form.
  - Using *if..else* statements:
    - If the choice is kilograms, call function *convert_kilogram(…)* and pass gram as argument.
    - If the choice is pounds, call function *convert_pound(…)* and pass gram as argument.
- In function *convert_kilogram()*:
  - Convert grams to kilogram and display the information on the paragraph (id=result) given.
  - 1 gram is equivalent to 0.001 kilograms.
- In function *convert_pound()*:
  - Convert grams to pound and display the information on the paragraph (id=result) given.
  - 1 gram is equivalent 0.0022 pounds.

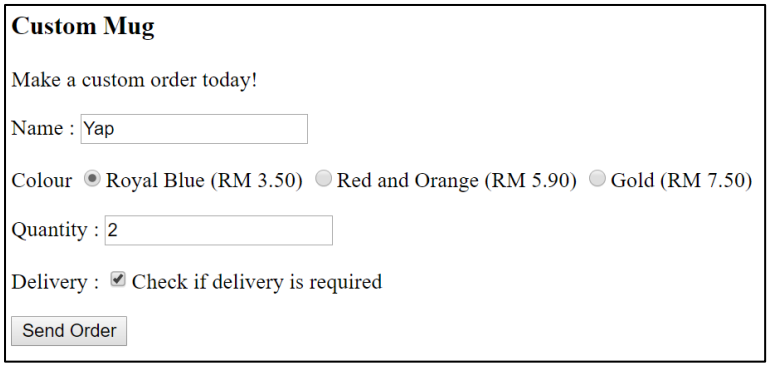


250 grams = 0.55 pounds

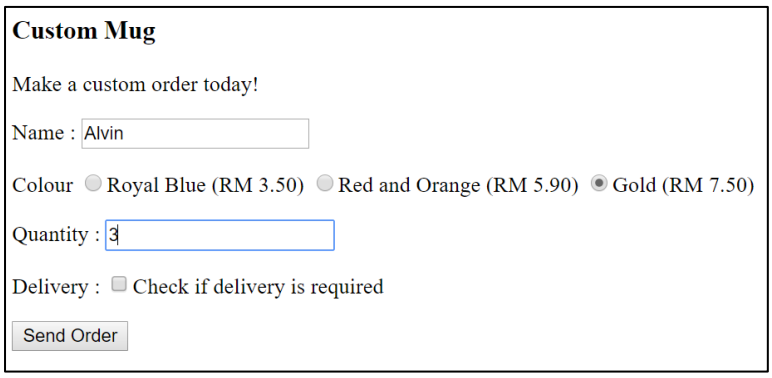
Question 2

Based on the HTML code given, write the JavaScript codes to calculate a customer's bill based on their purchase of custom mugs.

- In function *order_data()*:
  - Get all required information from the form.
  - Call function *get_price(…)* and pass mug colour as argument.
  - Calculate the bill.
  - If delivery is required, the charges is RM7.00.
  - Call function *print_bill(…)* and pass all necessary variables so that a bill can be shown to the customer.
- In function *get_price(…)*:
  - Based on the choice of mug colour, identify and return the mug price.
  - Use switch case statement.
- In function *print_bill(…)*:
  - Display all the bill details as shown below.



Customer Name : Yap
Mug Price : RM3.50
Quantity : 3
Delivery : RM7.00(Yes)
Total : RM10.50

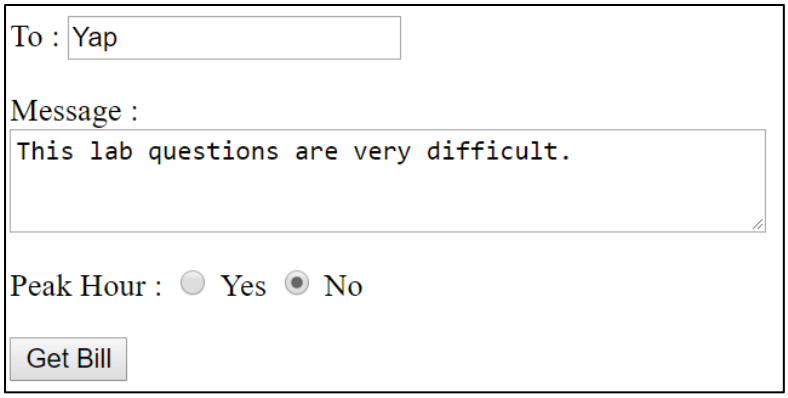


Customer Name : Alvin
Mug Price : RM7.50
Quantity : 3
Delivery : RM0.00(No)
Total : RM22.50

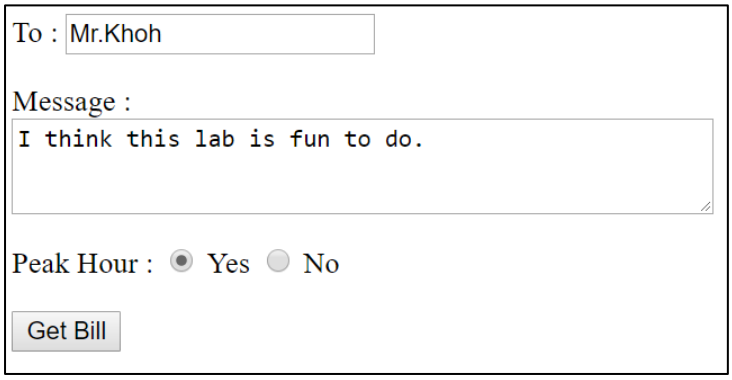
Question 3

Write the JavaScript codes to calculate the cost of sending a message.

- In function *input()*:
  - Get all information from the form.
  - Call function *get_rate(…)* and pass peak hour value as argument.
  - Calculate the bill. The rate is per each 10 characters of the message inclusive of spaces.
  - Call function *display_bill(…)* and pass all required variables to be displayed on the browser.
- In function *get_rate(…)*:
  - Using a switch case statement, identify the rate for the message.
  - Peak hour rate is RM0.03 while non peak hour rate is RM0.01.
  - Return the rate.
- In function *display_bill(…)*:
  - Display all the information as shown below.



To : Yap
Your message : This lab questions are very difficult
Peak Hour : No
Rate : RM 0.01
Payment : RM 0.04

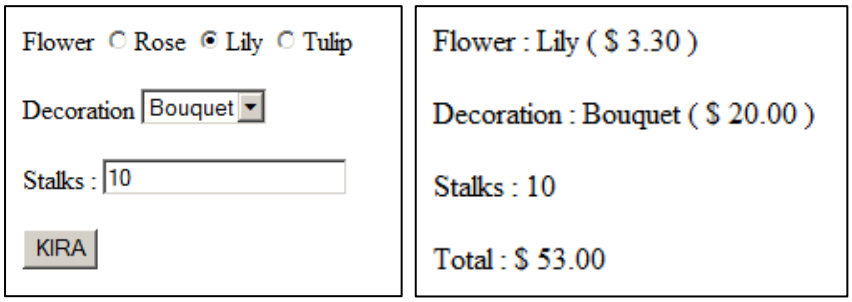


To : Mr. Khoh
Your message : I think this lab is fun to do
Peak Hour : Yes
Rate : RM 0.03
Payment : RM 0.09

Question 4

Write the JavaScript codes to display the bill for the purchase of flowers by customers.

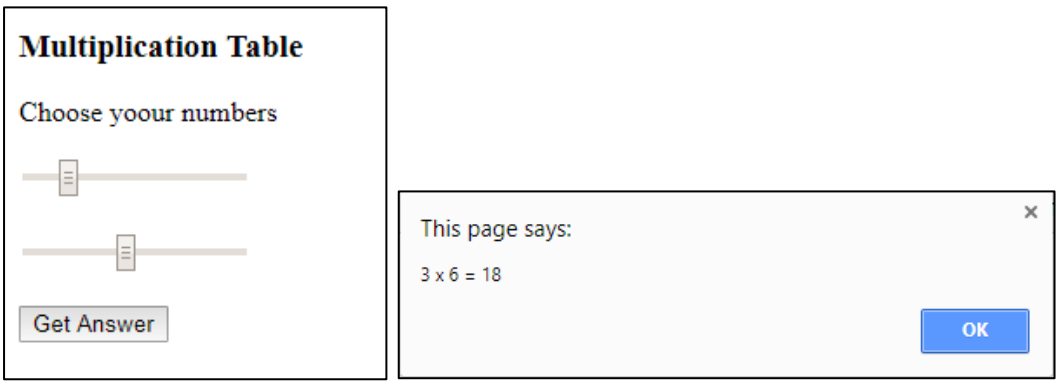
- Once the button is clicked, it will call function *get_data()*.
- Function *get_data()*:
  - Get flower, quantity and decoration type from the form.
  - Call function *get_flower_price(…)* and pass the flower name.
  - Call function *get_deco_price(…)* and pass the decoration type.
  - Calculate total price.
  - Display all necessary information on the browser.
- Function *get_flower_price()*:
  - Identify the flower price using a switch case statement.
  - Rose – RM 2.30, Lily – RM 3.30 and Tulip – RM 1.30.
  - Return the flower price.
- Function *get_deco_price(…)*:
  - Using if..else statement, identify the decoration price. "Basket' costs RM10.00 and "Bouquet" costs RM 20.00.
  - Return the decoration price.



Question 5

Write the JavaScript codes to display the results of multiplication of 2 numbers retrieved from the range input element.

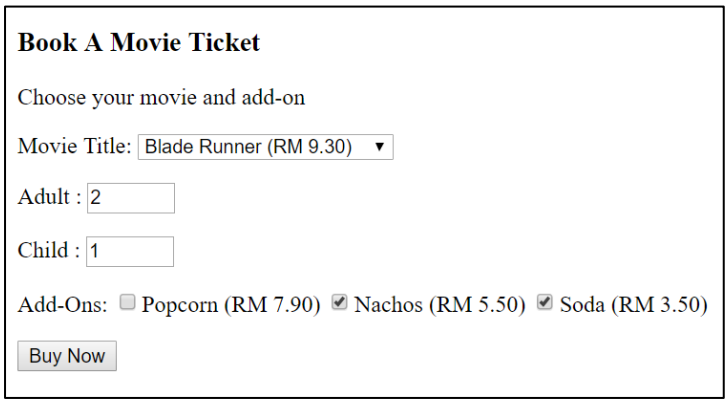
- In function *timetable()*:
  - Get the range values from the form.
  - Multiply the values and show the result using an alert();



Question 6

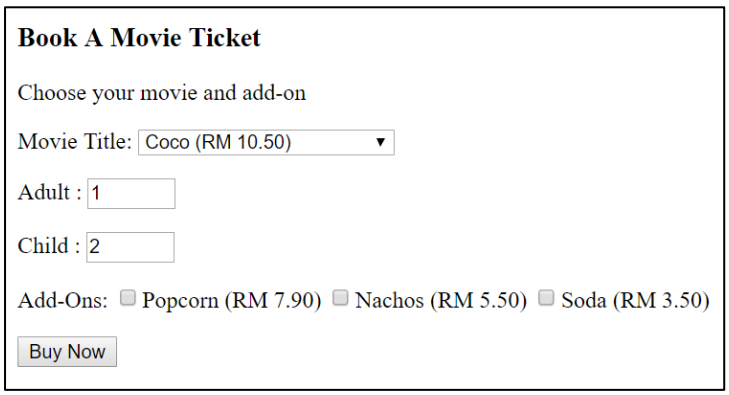
Write the JavaScript codes to calculate the cost of sending a message.

- In function *input()*:
  - Get the movie code, amount of adult and child from the form.
  - Based on the movie code, use a switch case statement to identify the movie name and ticket price.
  - Use a for loop to identify which add-on food code was chosen by the user and store the codes in an array.
  - Use another for loop:
    - To identify the name of the add-on food and price using if..else statements.
    - Display each add-on food and price on the browser.
    - Calculate the total add-on price.
  - Calculate the total payment for the entire purchase of tickets and add-on food.
  - Display the necessary information on the browser.



Movie Title : Blade Runner (RM 9.30)
Adult Total : RM 18.60 (2 x RM 9.30)
Child Total : RM 6.51 (1 x RM 6.51)
Add-On Total : RM9.00
Add-On Details :
-- Nachos (RM 5.50)
-- Soda (RM 3.50)

Total Bill : RM34.11



Movie Title : Coco (RM 10.50)
Adult Total : RM 10.50 (1 x RM 10.50)
Child Total : RM 14.70 (2 x RM 7.35)
Add-On Total : RM0.00

Total Bill : RM25.20