POLITEKNIK MALAYSIA
SULTAN MIZAN ZAINAL ABIDIN

POLYTECHNIC SULTAN MIZAN ZAINAL ABIDIN

DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

DFT 40163
WEB DESIGN TECHNOLOGY

ASSESMENT	LABORATORY TASK 4
NAME	FOO TUN FENG
REG NO	13DDT23F1052
PROGRAMME	DDT4-S4

INSTRUCTIONS :

1. Answer ALL the questions
2. Submit the assessment on _____

MARKING SCHEME		
CLO 1 P4	PLO 3	/ 20
	TOTAL	**/ 20**

THE ENTIRE QUESTION IS BASED ON JTMK'S QUESTION BANK APPROVED BY PROGRAMME LEADER. NO SIGNATURE IS REQUIRED.

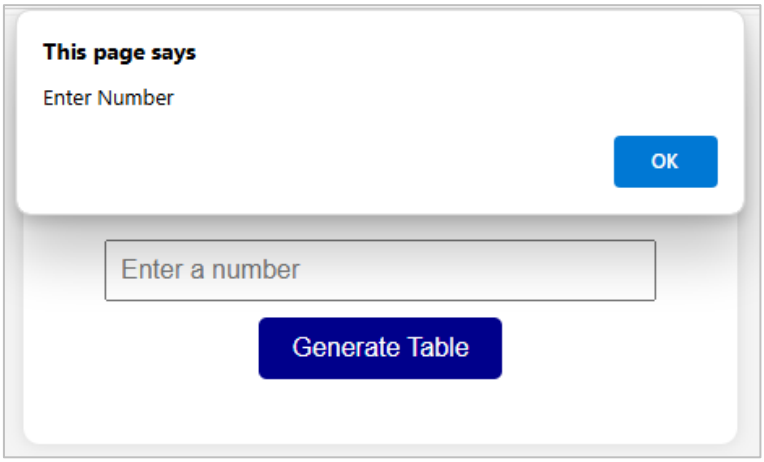
CHAPTER 4: JAVASCRIPT

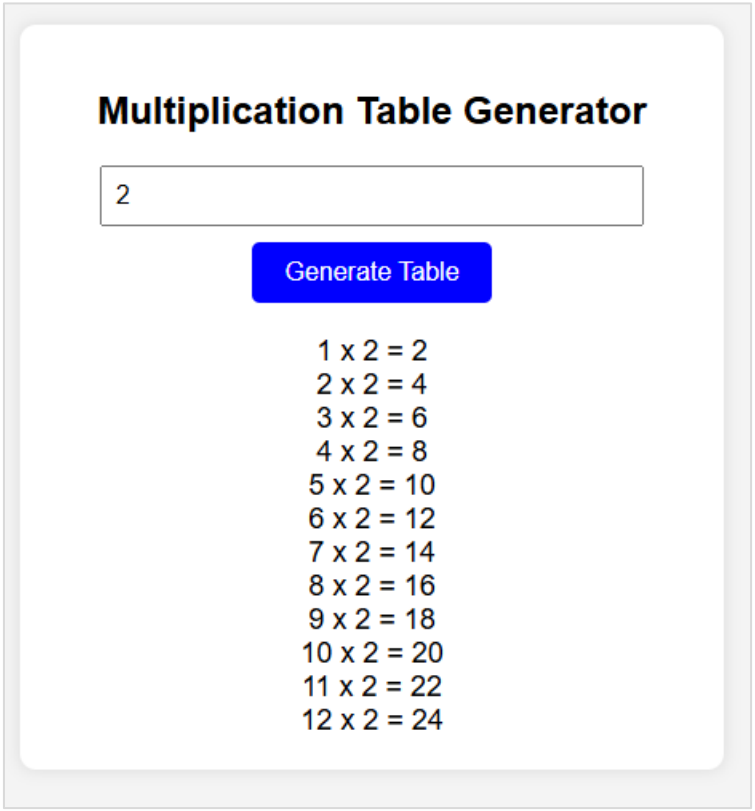
Question:

Create a simple web page to learn multiplication based on the following requirements.

Task 1: Multiplication Table

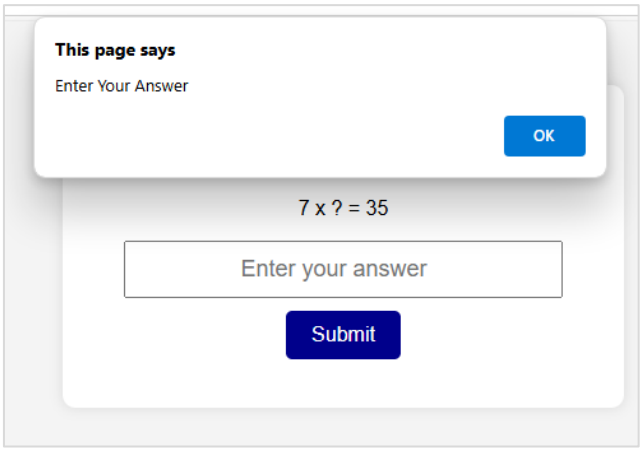
Create a program to generate a multiplication table for a number from 1 to 12. Prompt user to enter a number.

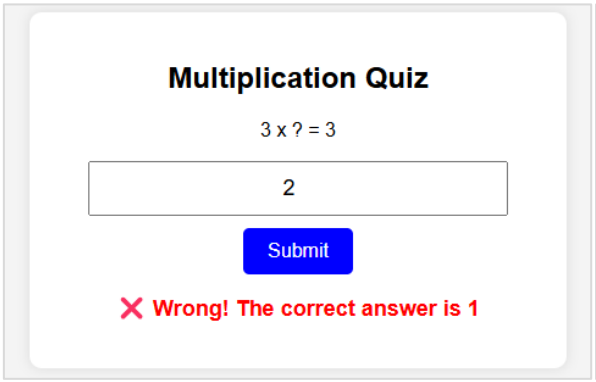


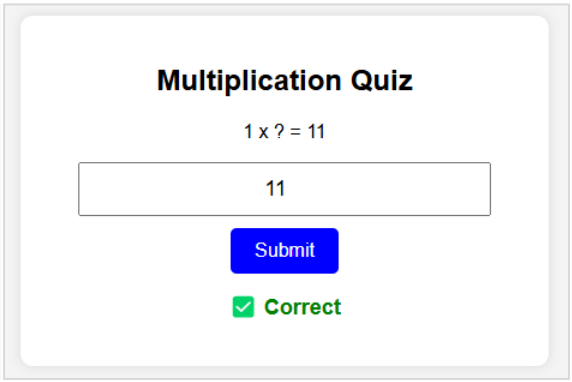


Task 2: Multiplication Quiz

1. Create a program to randomly generate two numbers between 1 and 12.
2. Display multiplication question: 2 x ? = 5
3. Let user input the answer in a text box.
4. Validate the answer and provide feedback.







You can use the following code to generate random numbers from 1 to 12

```
num1 = Math.floor(Math.random() * 12) + 1;
num2 = Math.floor(Math.random() * 12) + 1;
result = num1 * num2;
correctAnswer = num2;
```

To make your application more interactive, add the following code to generate new question after 2.5 seconds after user submit the answer.

```
setTimeout(generateQuestion, 2500);
```

Task 3: Create Menu Page

Create simple menu page to link Task 1 and Task 2.

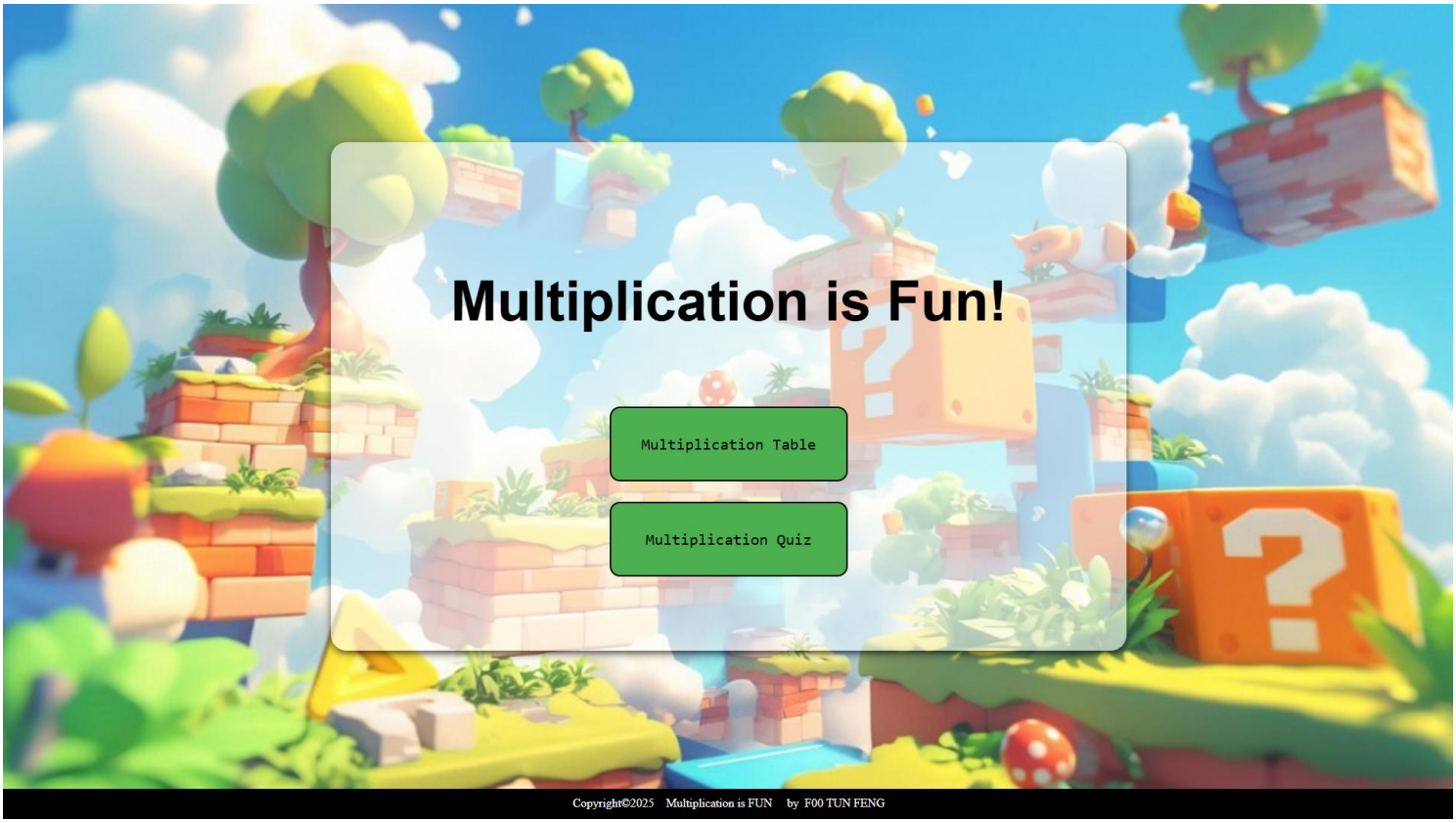
Evaluation.

Your marks will be evaluated based on:

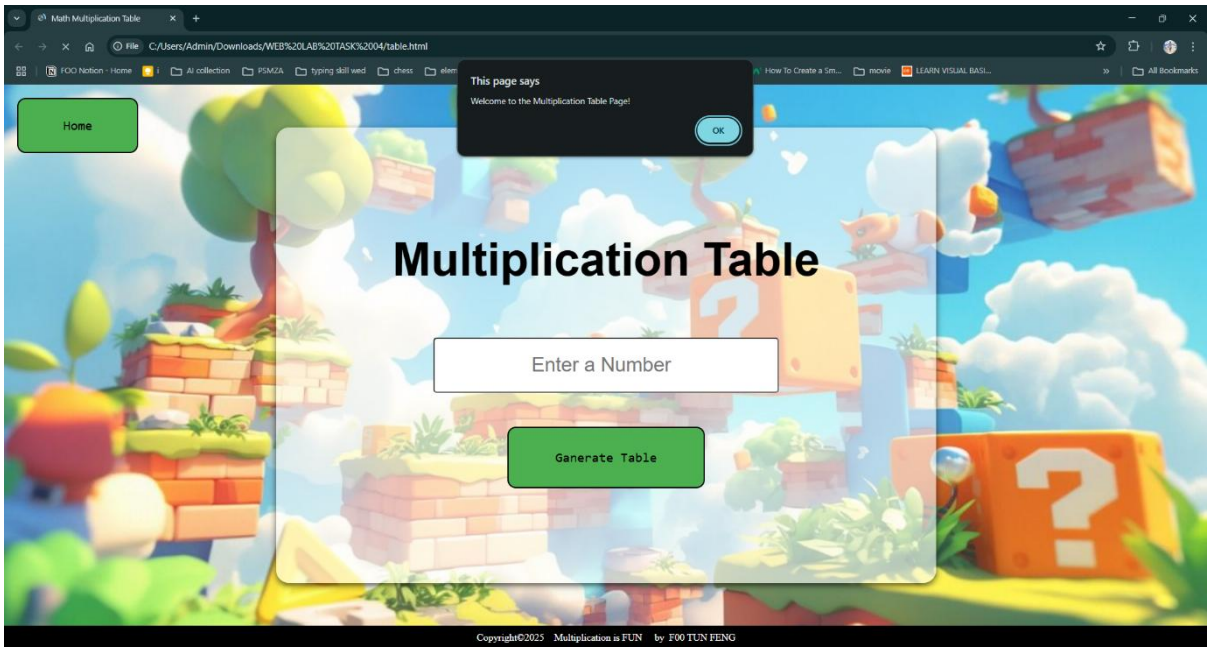
1. HTML Structure – 10 marks
2. CSS Structure – 10 marks
3. JavaScript – 80 marks

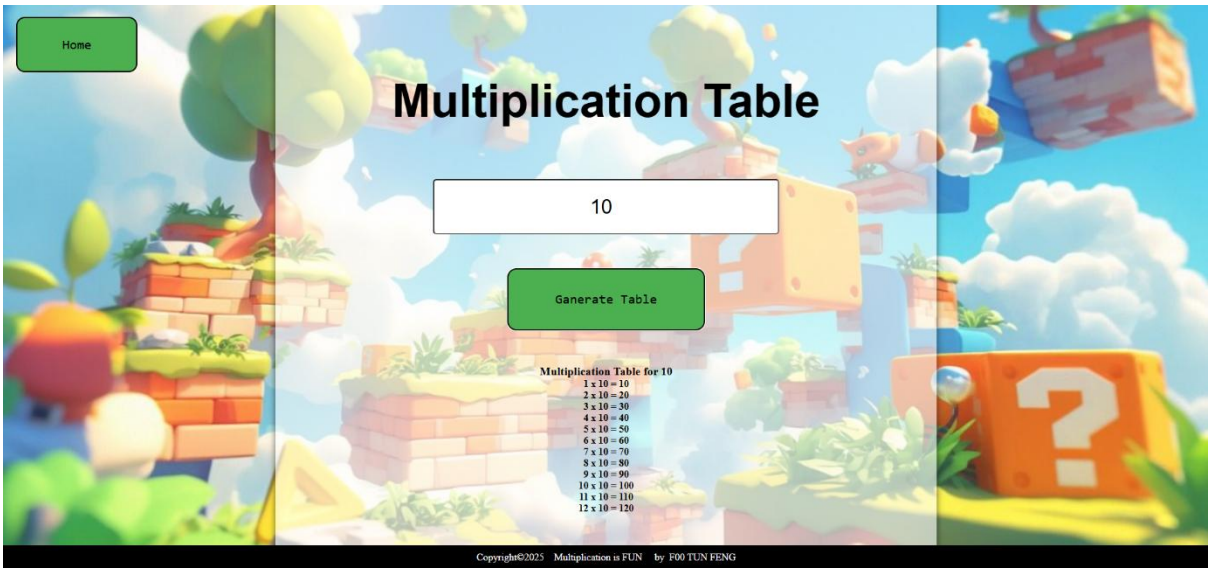
GUI

1. Main Menu

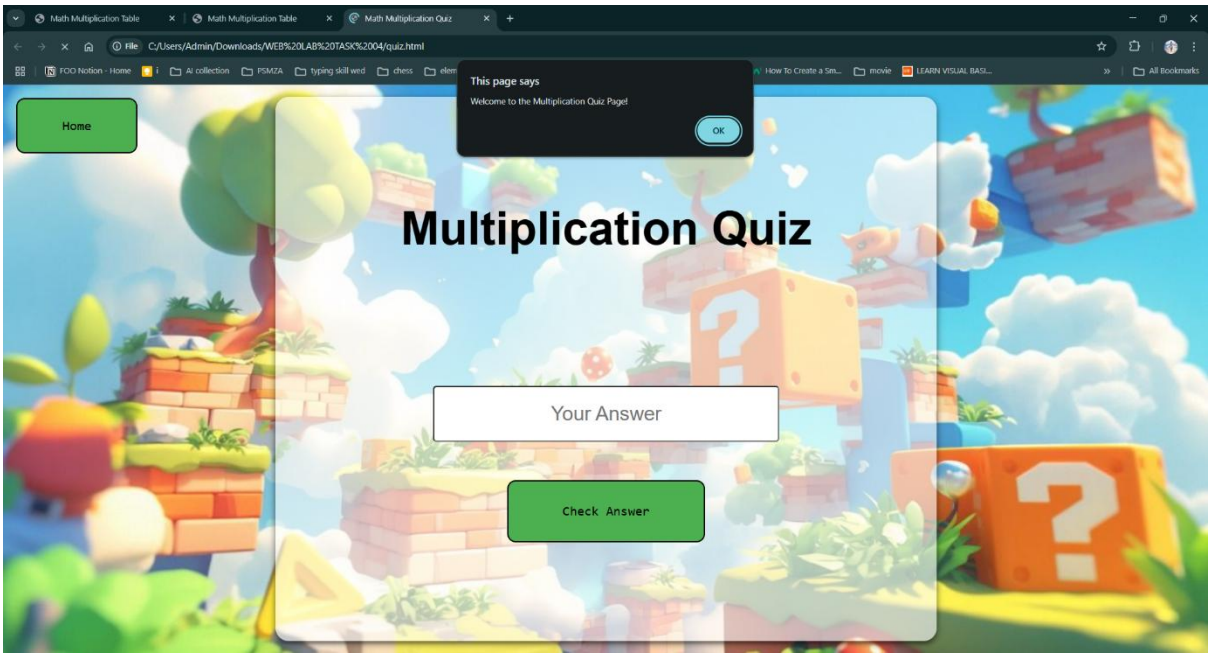


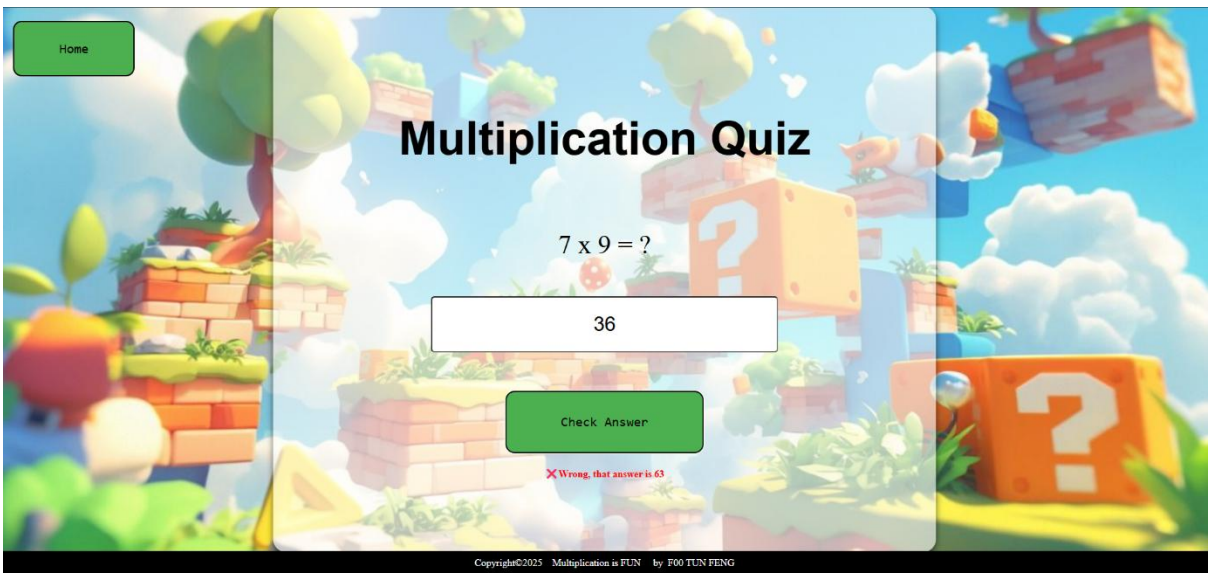
2. Multiplication Table webpage

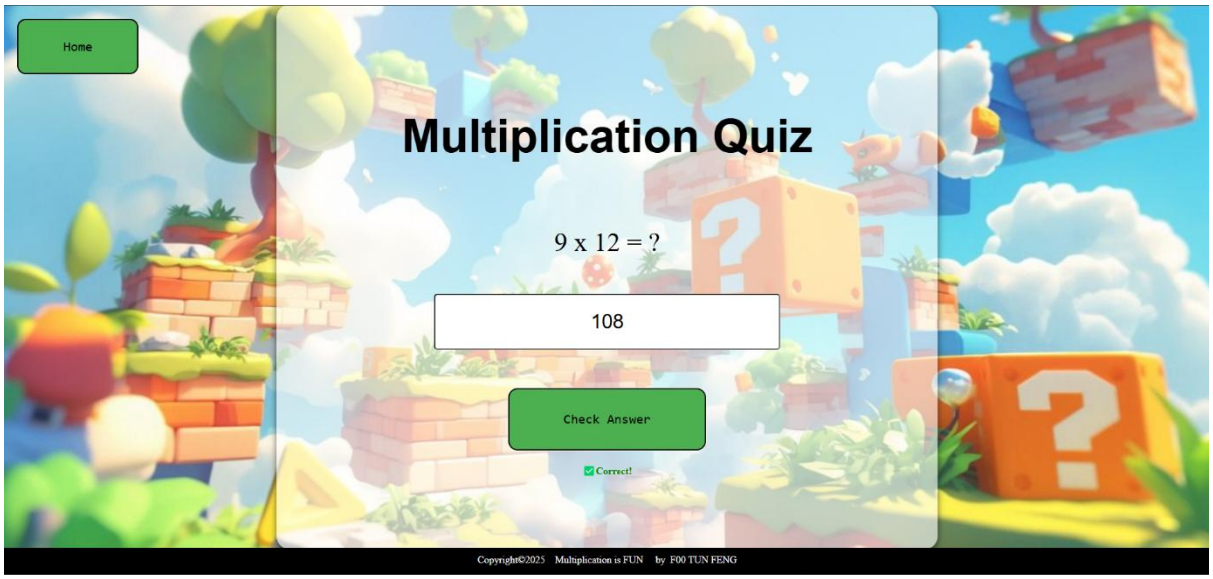




3. Multiplication Quiz Webpage






Home
Multiplication Quiz
9 x 12 = ?
108
Check Answer
Correct!
Copyright©2025 Multiplication is FUN by F00 TUN FENG

JS CODE

```
// Js for Table
function multiTable() {
    const num = parseInt(document.getElementById("number").value);
    const result = document.getElementById("result");

    if (isNaN(num) || num < 1 || num > 12) {
        result.innerText = "Please enter a valid number 1 -12.";
        return;
    }

    let table = "<h3><br><br>Multiplication Table for " + num + "</h3>";
    for (let i = 1; i <= 12 ; i++){
        table += i + "  x  " + num + " =  " + (i * num) + "<br>";
    }

    result.innerHTML = table;
}


// Quiz
    let num1 , num2, correctAnswer;
    const questionElement = document.getElementById('question');
    const answerInput = document.getElementById('answer');
    const sumitbutton = document.getElementById('sumbit');
    const feedback = document.getElementById('result');

function generateQuestion(){
    /*initliazi the value*/
    feedback.textContent = '';
    feedback.className = '';
    answerInput.value = '';

    num1 = Math.floor(Math.random() * 12) + 1;
    num2 = Math.floor(Math.random() * 12) + 1;
    correctAnswer = num1 * num2;

    questionElement.textContent = `${num1} x ${num2} = ?`;
    answerInput.focus();
}
```

```
function checkAnswer(){
    const UserAnswer = parseInt(answerInput.value);

    if (isNaN(UserAnswer)) {
        feedback.textContent = "Please enter a valid number!";
        feedback.className = "wrong";
        return;
    }

    if (UserAnswer === correctAnswer){
        feedback.textContent = "✅Correct!";
        feedback.className = "correct"
    } else {
        feedback.textContent = `❌Wrong, that answer is ${correctAnswer}`;
        feedback.className = "wrong";
    }

    setTimeout (generateQuestion, 2500);
}

document.addEventListener('DOMContentLoaded', function() {
    // Check which page we're on
    if (document.getElementById('quiz')) {
        alert("Welcome to the Multiplication Quiz Page!");
        generateQuestion();
        document.getElementById('submit').addEventListener('click', checkAnswer);
    }
    else if (document.getElementById('table')) {
        alert("Welcome to the Multiplication Table Page!");
    }
});
```

RUBRIC FOR LABORATORY TASK 4
(CLO1, P4)

CRITERIA	(Excellent) 4 Marks	(Good) 3 Marks	(Fair) 2 Marks	(Poor) 1 Marks	Weightage (%)	Marks
HTML Structure	Well-structured, semantic, and valid HTML code with proper elements used.	Mostly structured, minor errors, but correct elements used.	Some structure, noticeable errors, improper elements.	Poorly structured, incorrect elements, multiple errors.	10	___ /4 * 10
CSS Styling	Well-designed, visually appealing, and fully functional CSS.	Good styling, but minor design flaws.	Basic styling, lacks polish.	Poor styling or missing CSS.	10	___ /4 * 10
Multiplication Table (Task 1)	Generates a complete table correctly for any user input, dynamically updates.	Generates a table correctly but may not update dynamically.	Generates table with errors or missing elements.	Table does not work or missing.	35	___ /4 * 35
Multiplication Quiz (Task 2)	Generates random multiplication questions, accepts input, validates answers, and provides correct feedback.	Works mostly but may have minor validation or logic issues.	Has functionality but lacks accuracy or feedback issues.	Does not generate questions or validate answers properly.	35	___ /4 * 35
Interactivity & Logic (Task 3 - Menu Page)	Clear and functional navigation menu linking all tasks	Clear and functional navigation menu linking all tasks.	Clear and functional navigation menu linking all tasks.	Clear and functional navigation menu linking all tasks.	10	___ /4 * 10
					MARKS	_____ /100
					TOTAL	_____ / 20