



United International University (UIU)

Dept. of Computer Science & Engineering (CSE)

Final Exam Year: 2025 Trimester: Spring

CSE 4165/CSE 465 Web Programming

Total Marks: 30

Duration: 2 Hours

Any examinee found adopting unfair means will be expelled from the trimester / program as per UIU disciplinary rules.

1.	<p>JAVASCRIPT: Create a JavaScript application where users can test their password strength and get real-time feedback.</p> <p>index.html: Create a password input field (input type password), a "Check Strength" button, and below that a label field to display strength feedback and scoring results.</p> <p>script.js:</p> <ol style="list-style-type: none">1. Generate a target strength score of 100 points for a "Very Strong" password.2. Take the user's password input from the HTML file.3. Inside a function:<ul style="list-style-type: none">○ Calculate password strength based on these criteria:<ul style="list-style-type: none">■ Length: +10 points for every 2 characters (minimum 6 characters required)■ Uppercase letters: +15 points if present■ Lowercase letters: +15 points if present■ Numbers: +20 points if present■ Special characters (!@#\$%^&*): +25 points if present○ Display strength levels: "Very Weak" (0-30), "Weak" (31-50), "Medium" (51-70), "Strong" (71-90), "Very Strong" (91+)○ If password reaches 100+ points, display "Perfect Password!" and show a success message○ Keep track of how many attempts the user has made○ If the user makes more than 8 attempts without reaching "Strong" level, display "Need practice!" and suggest password tips <table border="1" data-bbox="176 1253 1391 1500"><thead><tr><th data-bbox="176 1253 775 1298">Sample Input</th><th data-bbox="775 1253 1391 1298">Sample Output</th></tr></thead><tbody><tr><td data-bbox="176 1298 775 1349">abc</td><td data-bbox="775 1298 1391 1349">Very Weak</td></tr><tr><td data-bbox="176 1349 775 1401">hello123</td><td data-bbox="775 1349 1391 1401">Weak</td></tr><tr><td data-bbox="176 1401 775 1453">Strong@Pass</td><td data-bbox="775 1401 1391 1453">Strong</td></tr><tr><td data-bbox="176 1453 775 1500">Perfect@Pass123</td><td data-bbox="775 1453 1391 1500">Perfect Password!</td></tr></tbody></table>	Sample Input	Sample Output	abc	Very Weak	hello123	Weak	Strong@Pass	Strong	Perfect@Pass123	Perfect Password!	[10]		
Sample Input	Sample Output													
abc	Very Weak													
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Strong@Pass	Strong													
Perfect@Pass123	Perfect Password!													
2.	<p>PHP: It's time to organize the annual UIU Tech Fest, and you need to calculate the budget for venue booking. Write a PHP function that takes three integers as input: the number of expected attendees, the cost per person for venue arrangement, and the maximum capacity of available venues. The function should calculate the minimum number of venues needed to accommodate all attendees (you must book complete venues; you cannot book partial venues). The function should also calculate how many empty seats will remain after all attendees are seated. Moreover, if each venue costs 15,000 BDT regardless of occupancy, how much money is wasted on empty seats?</p> <table border="1" data-bbox="176 1821 1391 2043"><thead><tr><th data-bbox="176 1821 362 1868">Attendees</th><th data-bbox="362 1821 548 1868">Cost per Person</th><th data-bbox="548 1821 775 1868">Venue Capacity</th><th data-bbox="775 1821 961 1868">Total Venues</th><th data-bbox="961 1821 1147 1868">Empty Seats</th><th data-bbox="1147 1821 1391 1868">Wasted Money (BDT)</th></tr></thead><tbody><tr><td data-bbox="176 1868 362 1915">250</td><td data-bbox="362 1868 548 1915">120</td><td data-bbox="548 1868 775 1915">80</td><td data-bbox="775 1868 961 1915">4</td><td data-bbox="961 1868 1147 1915">70</td><td data-bbox="1147 1868 1391 1915">8,400</td></tr></tbody></table>	Attendees	Cost per Person	Venue Capacity	Total Venues	Empty Seats	Wasted Money (BDT)	250	120	80	4	70	8,400	[10]
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	180	150	100	2	20	3,000																															
	300	100	75	4	0	0																															
3.	PHP & MYSQL: Create a database named 'uiutech_final' and a table named 'employee_final'. The employee table has the following structure and values:																																				
	<table border="1"> <thead> <tr> <th>EmployeeID</th><th>EmployeeName</th><th>DepartmentID</th><th>DepartmentName</th><th>Salary</th><th>PerformanceRating</th></tr> </thead> <tbody> <tr> <td>1</td><td>Arif Rahman</td><td>201</td><td>Software Development</td><td>45000</td><td>B</td></tr> <tr> <td>2</td><td>Marium Khan</td><td>201</td><td>Software Development</td><td>52000</td><td>A</td></tr> <tr> <td>3</td><td>Sabbir Hossain</td><td>202</td><td>Quality Assurance</td><td>38000</td><td>C</td></tr> <tr> <td>4</td><td>Samira Begum</td><td>203</td><td>UI/UX Design</td><td>42000</td><td>B</td></tr> </tbody> </table>							EmployeeID	EmployeeName	DepartmentID	DepartmentName	Salary	PerformanceRating	1	Arif Rahman	201	Software Development	45000	B	2	Marium Khan	201	Software Development	52000	A	3	Sabbir Hossain	202	Quality Assurance	38000	C	4	Samira Begum	203	UI/UX Design	42000	B
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	Now, do the following (write full code, not just SQL queries):																																				
	<ol style="list-style-type: none"> 1. Show the total number of employees who received each performance rating (A, B, C, D) across all departments. 2. If an employee has a salary below 40,000 BDT and their current performance rating is not 'D', change their performance rating to 'C'. 3. If an employee has a salary greater than 50,000 BDT, add a 5,000 BDT bonus to their salary, but only if the resulting salary is less than or equal to 60,000 BDT. 4. For each department, display the department names and the number of employees working in that department, sorted by the number of employees (largest department first). 																																				

Sample SQL Query	
<pre>\$servername = "localhost"; \$username = "username"; \$password = "password"; \$dbname = "myDB"; \$conn = new mysqli(\$servername, \$username, \$password, \$dbname); if (\$conn->connect_error) { die("Connection failed: " . \$conn->connect_error); } \$sql = "SELECT id, firstname, lastname FROM MyGuests"; \$result = \$conn->query(\$sql); if (\$result->num_rows > 0) { while(\$row = \$result->fetch_assoc()) { echo "id: " . \$row["id"]. " - Name: " . \$row["firstname"]. " " . \$row["lastname"]. "
"; } } else { echo "0 results"; } \$conn->close();</pre>	<pre>\$servername = "localhost"; \$username = "username"; \$password = "password"; \$dbname = "myDB"; \$conn = new mysqli(\$servername, \$username, \$password, \$dbname); if (\$conn->connect_error) { die("Connection failed: " . \$conn->connect_error); } \$sql = "UPDATE MyGuests SET lastname='Doe' WHERE id=2"; if (\$conn->query(\$sql) === TRUE) { echo "Record updated successfully"; } else { echo "Error updating record: " . \$conn->error; } \$conn->close();</pre>