

Course:	Structured Programming Methodology			Semester:	I	Date:	
Division:		Batch:				SET	F
Exam:	OST			Time:		Roll No:	

Q No	Question	Marks						
1	<p>Write a program to count how many numbers between 40 and 50 (including both) have a - sum of digits that is divisible by 5 using user defined functions.</p> <p>For example: 45. Its sum of digits is : $4 + 5 = 9$, and 9 is NOT divisible by 5, so 45 should NOT be counted. 41 is $4 + 1 = 5$, and 5 is divisible by 5, so 41 should be counted.</p> <p style="text-align: center;">OR</p> <p>Write a program to print the multiplication table of a number using user-defined function.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test Case 1</th><th style="text-align: center; padding: 2px;">Test Case 2</th></tr> </thead> <tbody> <tr> <td style="padding: 2px;">Input: 5 Output: prints $5 \times 1 = 5 \dots 5 \times 10 = 50$</td><td style="padding: 2px;">Input: n = 9 Output: prints $9 \times 1 = 9 \dots 9 \times 10 = 90$</td></tr> </tbody> </table>	Test Case 1	Test Case 2	Input: 5 Output: prints $5 \times 1 = 5 \dots 5 \times 10 = 50$	Input: n = 9 Output: prints $9 \times 1 = 9 \dots 9 \times 10 = 90$	15		
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2.a		7						
2.b	<p>Write a program that counts repeated vowels in a product name and prints discount based on count (using functions). Conditions: If vowel count $\geq 3 \rightarrow$ discount = 20%. Else no discount.</p> <p>Test Cases:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Input</th><th style="text-align: center; padding: 2px;">Output</th></tr> </thead> <tbody> <tr> <td style="padding: 2px;">AudioDevice</td><td style="padding: 2px;">Discount = 20%</td></tr> <tr> <td style="padding: 2px;">Fan</td><td style="padding: 2px;">No Discount</td></tr> </tbody> </table>	Input	Output	AudioDevice	Discount = 20%	Fan	No Discount	8
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