

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

Q1	Attempt Any ONE [Show all test Cases in output.]	Marks						
1	<p>Write a program that multiplies two matrices (A × B) entered by the user using a user defined function. The result should be displayed in the main function. Sample test cases:</p> <table> <tr> <th>Test Case 1</th><th>Test Case 2</th><th>Test Case 3</th></tr> <tr> <td> <b>Input:</b>  Matrix A (2×3):  1 2  3 4  5 6  Matrix B (3×2):  7 8 9  10 11 12  <b>Output:</b>  58 64  139 154 </td><td> <b>Input:</b>  Matrix A (2×2):  1 2  3 4  Matrix B (2×2):  5 6  7 8  <b>Output:</b>  19 22  43 50 </td><td> <b>Input:</b>  Matrix A (2×3):  1 2 3  4 5 6  Matrix B (2×2):  7 8  9 10  <b>Output:</b>  Matrix multiplication not possible  (c1 != r2) </td></tr> </table> <p style="text-align: center;">OR</p>	Test Case 1	Test Case 2	Test Case 3	<b>Input:</b> Matrix A (2×3): 1 2 3 4 5 6 Matrix B (3×2): 7 8 9 10 11 12 <b>Output:</b> 58 64 139 154	<b>Input:</b> Matrix A (2×2): 1 2 3 4 Matrix B (2×2): 5 6 7 8 <b>Output:</b> 19 22 43 50	<b>Input:</b> Matrix A (2×3): 1 2 3 4 5 6 Matrix B (2×2): 7 8 9 10 <b>Output:</b> Matrix multiplication not possible (c1 != r2)	15
Test Case 1	Test Case 2	Test Case 3						
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2A	<p>Implement a function that finds the maximum number from a sequence entered by the user. The result should be displayed in the main function. Sample test cases:</p> <table> <tr> <th>Test Case 1</th><th>Test Case 2</th><th>Test Case 3</th></tr> <tr> <td> <b>Input:</b> n = 10  Sequence: 2 3 1 4 5 3 6 4 3 8  <b>Output:</b> 8 </td><td> <b>Input:</b> n = 0  <b>Output:</b> -1 </td><td> <b>Input:</b> n = 5  Sequence: 7 6 3 5 2  <b>Output:</b> 7 </td></tr> </table>	Test Case 1	Test Case 2	Test Case 3	<b>Input:</b> n = 10 Sequence: 2 3 1 4 5 3 6 4 3 8 <b>Output:</b> 8	<b>Input:</b> n = 0 <b>Output:</b> -1	<b>Input:</b> n = 5 Sequence: 7 6 3 5 2 <b>Output:</b> 7	8
Test Case 1	Test Case 2	Test Case 3						
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2B	<p>Write a program that finds and prints the sum of each row and each column in <b>each matrix</b>. The result should be displayed in the main function. Sample test cases:</p> <table> <tr> <th>Test Case 1</th><th>Test Case 2</th><th>Test Case 3</th></tr> <tr> <td> <b>Input:</b>  Matrix (2×2):  1 2  3 4  <b>Output :</b>  1 2 3  3 4 7  4 6 10 </td><td> <b>Input:</b>  Matrix (3×2):  2 4  6 8  1 3  <b>Output (4×3):</b>  2 4 6  6 8 14  1 3 4  9 15 24 </td><td> <b>Input:</b>  Matrix (2×3):  5 10 15  20 25 30  <b>Output :</b>  5 10 15 30  20 25 30 75  25 35 45 105 </td></tr> </table>	Test Case 1	Test Case 2	Test Case 3	<b>Input:</b> Matrix (2×2): 1 2 3 4 <b>Output :</b> 1 2 3 3 4 7 4 6 10	<b>Input:</b> Matrix (3×2): 2 4 6 8 1 3 <b>Output (4×3):</b> 2 4 6 6 8 14 1 3 4 9 15 24	<b>Input:</b> Matrix (2×3): 5 10 15 20 25 30 <b>Output :</b> 5 10 15 30 20 25 30 75 25 35 45 105	7
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