



<b>Course Code:</b> CSA0886	<b>Course Name:</b> Python Programming for Crafting Web Applications	
<b>Branch:</b> CSE	<b>Slot:</b> A	<b>Date:</b> 10/07/2024

**Session :** 08.00 to 09.30

Unit	Topic	Programs
4	Errors and Exceptions Handling Exceptions Modules Packages	1. Perform student grades by validating the student mark. 2. Perform string to numeric conversion with exception handling. 3. Create a list with N zeros filled in it. 4. Flatten the multi-dimension list. 5. Print the transpose of the given matrix. 6. Print the list's mean, median, and standard deviation.

P. No.	Program
1	<b>Grade</b> Perform student grades by validating the student mark.
2	<b>Type Conversion</b> Perform string to numeric conversion with exception handling. <b>Test Case 1:</b> <b>Input:</b> "5" <b>Output:</b> 5 <b>Test Case 2:</b> <b>Input:</b> "a" <b>Output:</b> An Error has Occured.
3	<b>Zero Fill</b> Create a list with N zeros filled in it. <b>Test Case 1:</b> <b>Input:</b> n = 5 <b>Output:</b> [0, 0, 0, 0, 0] <b>Test Case 2:</b> <b>Input:</b> n = 3 <b>Output:</b> [0, 0, 0]
4	<b>Flatten List</b> Flatten the multi-dimension list. <b>Test Case 1:</b> <b>Input:</b> [[1, 2, 3], [4, 5, 6]] <b>Output:</b> [1, 2, 3, 4, 5, 6] <b>Test Case 2:</b> <b>Input:</b> [1, [2, 3]] <b>Output:</b> [1, 2, 3]
5	<b>Transpose</b> Print the transpose of the given matrix. <b>Test Case 1:</b> <b>Input:</b> matrix = [[1, 2, 3], [4, 5, 6], [7, 8, 9]] <b>Output:</b> [[1, 4, 7], [2, 5, 8], [3, 6, 9]] <b>Test Case 2:</b> <b>Input:</b> matrix = [[1, 2], [3, 4], [5, 6]] <b>Output:</b> [[1, 3, 5], [2, 4, 6]]
6	<b>Mean, Median, SD</b> Print the list's mean, median, and standard deviation. <b>Test Case 1:</b> <b>Input:</b> [2, 4, 6, 8, 10] <b>Output:</b> Mean: 6, Median: 6, Standard Deviation: 3.1622 <b>Test Case 2:</b> <b>Input:</b> [1, 2, 3, 4, 5, 6] <b>Output:</b> Mean: 3.5, Median: 3.5, Standard Deviation: 1.8708