ACADEMY OF TECHNOLOGY
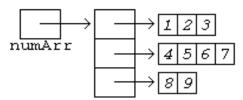**Lab Assignment (Assignment 21)**
Paper name: Data Structure and Algorithm
Code: PCC-CS391   **Semester: 3rd**
Discipline: CSE   **Time: 2 Hours**
Date: December 15, 2020

1. Write a C or C++ program to implement ***concatenation*** of two user input strings. Allocate the required memory dynamically to store the resultant array.

2. Write a C or C++ program to determine the ***transpose*** of a ***matrix*** using dynamic memory allocation.

3. In computer science, a ***ragged*** array, also known as a ***jagged*** array, is an array of arrays of which the member arrays can be of different sizes and producing rows of jagged edges when visualized as output. The representation of jagged array is given below.

Layout of the same array

   Write a program in C or C++ to implement a ***jagged*** array using dynamic memory allocation. (Note: You can use a separate array to store the size of each row.)