# School of Computer Science Engineering and Technology

Course- BTech                                   Type- Specialization Core
Course Code-  CSET-214                          Course Name- Data Analysis using Python
Year- 2024-25                                   Semester- Odd
Date-                                           Batch-

## Lab # No.  (6) String Manipulation in Pandas

CO Mapping

| Lab No. | Name | CO1 | CO2 | CO3 |
|---------|------|-----|-----|-----|
| 6 | **String Manipulation in Pandas** | ↗ | ↗ | ↗ |

**Introduction:**

String manipulation is a fundamental concept in programming that involves modifying or processing text data, known as strings. It refers to the manipulation of textual data to achieve desired results. String manipulation involves applying various operations to strings, such as concatenation, splitting, searching, replacing, and transforming. These operations allow programmers to modify the content, structure, or format of a string to suit their specific needs.

1. **WAP in Python to accomplish the following task.**
   **Dataset: https://drive.google.com/file/d/1k03LEMz5ake0Aq56qkgNgSjl2-p6TWox/view?usp=sharing**

   a. Convert all names to uppercase.
   b. Extract the title (Mr., Mrs., etc.) from the names.
   c. Replace 'Mr.' with 'Mister' in the names.
   d. Count the number of occurrences of the letter 'a' in each name
   e. Make two columns by extracting last name and first name from 'Name' column

2. WAP in Python to accomplish the following task.
   **Dataset:**
   **https://drive.google.com/file/d/1c8Cw31pFSTyRGnHwogAmZyEzbAnKJpye/view?usp=sharing**

   a. Extract the first word from the title.
   b. Replace 'the' with 'The' in the titles.
   c. Count the number of words in the title.
   d. Concatenate the title and director into a new column.
   e. Check if the director column contains 'Steven Spielberg'.
   f. Extract the last name of the director.
   g. Calculate the length of each title.

3. WAP in Python to accomplish the following task.
   **Dataset: https://drive.google.com/file/d/1Hr7xp-KiyhacaQkALEIe_nvnsU8CQzDg/view?usp=sharing**

   a. Make a separate column as region code from region.
   b. Print all unique values in department.
   c. Display all unique values in recruitment channel and its count
   d. Replace "_"in column name by " ".