**Intro to Data Science**

Assignment 1

*Instructions:*

1. You can solve these questions on Google Colab. The instructions for using Google Colab are given in the worksheet guidelines.
2. You have to submit the assignment on LMS after completing it.
3. Convert the variable F to uppercase: F = “I am a student at Knowledge Streams” and find the first index of the sub-string Knowledge.
4. Consider the tuple: flavors = ("vanilla", "mango", "chocolate", "salted caramel", "tutti frutti", "coffee"). Now find the length of the tuple, and flavors and use slicing to obtain the first and last element.
5. Concatenate the following lists A = [-2, 'a'] and B = [‘+’,4, ‘a’, 'c'] and store it in a variable X. Retrieve the elements stored at index 1, 2, and 3 of X.
6. Convert the list X=['horse', 'dragon', 'fox', 'snake', ‘rat’, ‘cat’, ‘hen’] to a set. Create a new list Y=['dragon', 'snake', ’frog’] Find out if Y is a subset of X and lastly create a new set that is the intersection of X and Y.
7. Consider the Following dictionary students\_dict = {'Intro to Data Science': 25, 'Machine Learning': 18, 'Cybersecurity': 35}. Use the dictionary to find the total number of students of **Intro to Data Science** and find out what are the keys and what are the values in this dictionary.