Faculty-in-charge: Dr. D.K. Shaw, Dr. Ashok Kumar Mehta

Soft Computing Lab Assignment 2:

- 1. Write a Python function to calculate the factorial of a number (a non-negative integer). The function accepts the number as an argument.
- 2. Write a Python function that takes a list and returns a new list with unique elements (No duplicate value) of the first list.

Example: L1=[5,4,3,5,3,7] New=[5,4,3,7]

- 3. Write a code to reverse an array (Use Numpy).
- 4. Write a Pandas program to convert the first column of a DataFrame as a Series.

Sample Output:

Original DataFrame:

col1 col2 col3

0 5 4 7

1 2 1 5

2 3 6 8

3 4 9 12

4 7 5 1

5 11 0 11

1st column as a Series:

0 5

1 2

2 3

3 4

4 7

5 11

5. Read the dataset file 'USA_Housing' using pandas and create a new dataframe to store first 50 row and 'Avg. Area House Age', 'Avg. Area Number of Bedrooms' and 'price' column of the Dataset.

Submission Link:

 $\frac{https://docs.google.com/forms/d/e/1FAIpQLSfUrEDr4gpbIfrHjo_cHUXqrDOewRFV}{SnvN2zha9CobrtHpbQ/viewform?usp=sf_link}$

Submit by Sunday(13.02.2022).