**Day 3 Session 2 Exercises**

**Pandas and Numpy Exercise 20 Questions**

Write a Pandas program to create and display a one-dimensional array using series containing event numbers upto 10000

#tip : use List Comprehension

#ds = pd.Series([0,2, 4, 6, 8..... 10000])

Write a Pandas program to convert a Panda module Series of the numbers which are between 1000 and 2000 (both inclusive) and divisable by 5 to Python list and after convertion print its type

Write a Pandas program to add, subtract, multiple and divide two Pandas Series and print their results using the Sample Series: [2, 4, 6, 8, ...100], [1, 3, 5, 7, 9...99]

Write a Pandas program to compare (Equivalence, greater than, less than, not equal to )the elements of the two Pandas Series.

#Sample Series: [All positive numbers divisable by 7 upto 1000], [All positive numbers divisable by 11 upto 1000]

Write a Pandas program to convert a NumPy array to a Pandas series.

#Sample NumPy array: d1 = [10, 20, 30, 40, 50... 1000]

Write a Pandas program to convert a given Series to an array.

#Sample series is ['100', '200', ‘300’,’400’,’500’,'python', '300.12', '400',’is’,’great’,’language’]

Write a Pandas program to sort a given Series.

#Sample series is ['100', '200', ‘300’,’400’,’500’,'python', '300.12', '400',’is’,’great’,’language’]

Write a Pandas program to create a subsets of a given series based on value and condition.

#Sample NumPy array: d1 = [10, 20, 30, 40, 50... 1000]

# value and condtion : Subset 1 :numbers divisable by 7 Subset 2 : numbers divisable by 5

Write a Pandas program to create the mean and standard deviation, maximum and minimum of the data of a given Series of the prime numbers upto 1000

Write a Pandas program to get the elements of an array values into column-wise.  
#Sample data: {‘X’:[All odd numbers but not divisable by 7 upto 1000], 'Y':[ All even numbers but not divisable by 5 upto 1000 ],'Z':[ All odd numbers but not divisable by 3 upto 1000]}

Write a Pandas program to display the first 10 rows of the DataFrame for any particular three fields.

Write a Pandas program to get the details of the seventh movie of the DataFrame for any particular three fields #(movie\_metadata.csv file).

Write a Pandas program to sort the DataFrame based on title\_year from dataset of movie\_metadata.csv for any particular three fields

Write a Pandas program to sort the DataFrame based on country and language from dataset of movie\_metadata.csv

Write a Pandas program to get the details of the movies record number divisable by 5 of the DataFrame #(movie\_metadata.csv file).

Write a Pandas program to find the mean and standard deviation, maximum and minimum of the data of 50 students Python marks stored in a CSV file called Python\_mark.csv( you have to create the file yourself like rollno,mark for 50 records)

Write a NumPy program to create a random 4x4 array and extract the 2nd and 3rd rows of the array and store them into a variable.

Write a NumPy program to create a 10x10 array with random values and find the minimum and maximum values.

Write a NumPy program to generate 8 random integers between 100 and 300

Write a NumPy program to create a random integer nos of size 20 and sort it.