**MODULE – 7 ASSIGNMENT**

**Python for data analytics**

**Please implement Python coding for all the problems.**

1. Please take care of missing data present in the “*Data.csv*” file using the Python module

“sklearn.impute” and its methods, also collect all the data that has “Salary” less than “70,000”.

1. Subtracting dates:

Python date objects let us treat calendar dates as something like numbers: we can compare them, sort them, add, and even subtract them. Do the math with dates in a way that would be a pain to do by hand. The 2007 Florida hurricane season was one of the busiest on record, with 8 hurricanes in one year. The first one hit on May 9th, 2007, and the last one hit on December 13th, 2007. How many days elapsed between the first and last hurricane in 2007?

Instructions:

Import date from datetime.

Create a date object for May 9th, 2007, and assign it to the start variable.

Create a date object for December 13th, 2007, and assign it to the end variable.

Subtract start from end, to print the number of days in the resulting timedelta object.

1. Representing dates in different ways

Date objects in Python have a great number of ways they can be printed out as strings. In some cases, you want to know the date in a clear, language-agnostic format. In other cases, you want something which can fit into a paragraph and flow naturally.

Print out the same date, August 26, 1992 (the day that Hurricane Andrew made landfall in Florida), in a number of different ways, by using the “ .strftime() ” method. Store it in a variable called “Andrew”.

Instructions:

Print it in the format 'YYYY-MM', 'YYYY-DDD', and 'MONTH (YYYY)'

1. For the dataset “Indian\_cities”,
2. Find out the top 10 states in female-male sex ratio.
3. Find out the top 10 cities in the total number of graduates.
4. Find out the top 10 cities and their locations in respect of total ‘effective\_literacy\_rate’.
5. For the data set “Indian\_cities”
6. Construct a histogram on ‘literates\_total’ and comment on the inferences.
7. Construct a scatter plot between male graduates and female graduates.
8. For the data set “Indian\_cities”
9. Construct Boxplot on the total effective literacy rate and draw inferences.
10. Find out the number of null values in each column of the dataset and delete them.