**MODULE 6 PACKAGES**

**Implement in Python**

1. For the dataset “Indian\_cities”,
2. Find out top 10 states in female-male sex ratio

Ans= f\_m\_ratio

state\_name sex\_ratio

KERALA 1066.714286

MANIPUR 1055.000000

MEGHALAYA 1042.000000

PUDUCHERRY 1035.000000

MIZORAM 1029.000000

TRIPURA 1002.000000

TAMIL NADU 1001.031250

ANDHRA PRADESH 999.404762

KARNATAKA 987.115385

ASSAM 950.750000

1. Find out top 10 cities in total number of graduates

Ans= file variable as “top\_grad\_city”

Index city

141 Delhi

185 Greater Mumbai

72 Bengaluru

184 Greater Hyderabad

119 Chennai

274 Kolkata

7 Ahmadabad

380 Pune

288 Lucknow

225 Jaipur

1. Find out top 10 cities and their locations in respect of total effective\_literacy\_rate.

Ans= file variable as “top\_city\_loc”

index name\_of\_city location

9 Aizawl 23.727107,92.7176389

271 Kochi 9.9312328,76.2673041

461 Thrissur 10.5276416,76.2144349

278 Kozhikode 11.2587531,75.78041

14 Alappuzha 9.4980667,76.3388484

264 Khardaha 22.7002943,88.3753455

333 Nagercoil 8.1832857,77.4118996

13 Alandur 12.9974873,80.2006371

352 North Barrackpur 22.7902358,88.367179

431 Shimla 31.1048145,77.1734033

1. For the data set “Indian\_cities”
2. Construct histogram on literates\_total and comment about the inferences

Ans- histogram on literates\_total is right / positive skewed . also we can say that in this data we must have high value outlier . used library is matplotlib.

1. Construct scatter plot between male graduates and female graduates
2. For the data set “Indian\_cities”
3. Construct Boxplot on total effective literacy rate and draw inferences

Ans- according to the boxplot of total effective literacy rate we can say that it have some low value outlier and also distribution is left skewed . used library is matplotlib

1. Find out the number of null values in each column of the dataset and delete them.

Ans- Here in this data set do not have any null value .