### **Bangladesh University of Business & Technology**

# Dhaka, Commerce College Road Mirpur-2, Dhaka-1216



Course Code : CSE 4176

Course Title : Data Mining Lab

## **Assignment - 2**

Submitted By	Submitted To					
Mafuja Akter Mitu	Khan Md. Hasib					
ld:18192103068	Assistant Professor					
Intake:41	Dept of CSE, BUBT					
sec:03						

CO2 Apply calculating mathematical statistics techniques (such as: mean -

average value, median - middle value, median - middle value, median - middle value) in the following dataset -

https://www.kaggle.com/datasets/muthuj7/weather-dataset

#### 1.Import library



#### 2. Upload the dataset & Viewing the data



1 2006-04-01 01 000 000		Formatted Date	Summary	Precip Type	Temperature (C)	Apparent Temperature (C)	Humidity	Wind Speed (km/h)	Wind Bearing (degrees)	Visibility (km)	Loud Cover	Pressure (millibars)	Daily Summary
2 2006-04-01 02 000 00 00 Mostly rain 8 288889 5 944444 0.83 14.1036 269 0 15.8263 0.0 1016.51 Partly cloudy throughout the 4 2006-04-01 04 000 00 00 00 00 00 00 00 00 00 00 00	0			rain	9.472222	7.388889	0.89	14.1197	251.0	15.8263	0.0	1015.13	Partly cloudy throughout the day.
2 +0200 Cloudy fain 9.37778 9.37778 0.89 3.9284 20.0 14.9669 0.0 1015.94 Partly cloudy throughout the 40200 Cloudy rain 8.288889 5.944444 0.83 14.1036 269.0 15.8263 0.0 1016.41 Partly cloudy throughout the 40200 Cloudy rain 8.75556 6.977778 0.83 11.0446 259.0 15.8263 0.0 1016.51 Partly cloudy throughout the 40200 Cloudy rain 8.75556 6.977778 0.83 11.0446 259.0 15.8263 0.0 1016.51 Partly cloudy throughout the 40200 Cloudy rain 8.75556 6.977778 0.83 11.0446 259.0 15.8263 0.0 1016.51 Partly cloudy throughout the 40200 Cloudy rain 8.75556 6.977778 0.83 11.0446 259.0 15.8263 0.0 1016.51 Partly cloudy throughout the 40200 Cloudy rain 8.75556 2012-02-03.18.00.00.00 Foggy snow -10.00000 -16.150000 0.84 12.8800 10.0 2.5760 0.0 1028.10 Foggy starting in the m 40200 Continuing Foggy snow -10.003333 -15.861111 0.85 11.7530 18.0 2.3828 0.0 1028.09 Foggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy snow -10.00000 -16.150000 0.84 12.8800 20.0 12.880 0.0 1028.09 Foggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m 40200 Continuing State Partly Cloudy throughout the 40200 Poggy starting in the m	1			rain	9.355556	7.227778	0.86	14.2646	259.0	15.8263	0.0	1015.63	Partly cloudy throughout the day.
4 2006-04-01 04-00 00 000	2			rain	9.377778	9.377778	0.89	3.9284	204.0	14.9569	0.0	1015.94	Partly cloudy throughout the day.
4 +0200 Cloudy fain 8.75556	3			rain	8.288889	5.944444	0.83	14.1036	269.0	15.8263	0.0	1016.41	Partly cloudy throughout the day.
55362         2012-02-03 18 00 00 000 +0100         Foggy         snow         -10 000000         -16 150000         0.84         12 8800         10.0         2.5760         0.0         1028.10         Foggy starting in the m continuing           55363         2012-02-03 190 000 000 +0100         Foggy         snow         -10 033333         -15.861111         0.85         11.7530         18.0         2.3828         0.0         1028.09         Foggy starting in the m continuing           55364         2012-02-03 20 00 000 000 +0100         Foggy         snow         -10 000000         -16.150000         0.84         12.8800         20.0         1.2880         0.0         1028.10         Foggy starting in the m continuing           55364         2012-02-03 2100 000 000 +0100         Foggy         snow         -10 000000         -16.150000         0.84         12.8800         20.0         1.2880         0.0         1028.10         Foggy starting in the m continuing           55364         2012-02-03 210 000 000         Foggy         snow         -10 000000         -15.666667         0.84         11.2700         20.0         1.2880         0.0         1028.10         Foggy starting in the m continuing           55365         2012-02-03 22 00 000000         Foggy         snow         -10 000000	4			rain	8.75556	6.977778	0.83	11.0446	259.0	15.8263	0.0	1016.51	Partly cloudy throughout the day.
65364         2012-02-03 20 00 00 000 +0100         Foggy         snow         -10 000000         -16 150000         0.84         12 5800         10 0         2.3760         0.0         1028.10         Engly starting in the m continuing           55364         2012-02-03 20 00 00 00 00 +0100         Foggy         snow         -10 000000         -16 150000         0.84         12.8800         20 0         1 2880         0.0         1028.10         Foggy starting in the m continuing           55364         2012-02-03 20 00 00 00 00 +0100         Foggy         snow         -10 000000         -16 150000         0.84         12.8800         20 0         1 2880         0.0         1028.10         Foggy starting in the m continuing           55364         2012-02-03 21 000 000         Foggy         snow         -10 000000         -15 666667         0.84         11 2700         20 0         1 2880         0.0         1028.20         Foggy starting in the m continuing           55365         2012-02-03 22 00 00 000         Foggy         snow         -10 000000         -15 666667         0.84         11 2700         20 0         1 2880         0.0         1028.20         Foggy starting in the m continuing           55366         2012-02-03 22 00 00 0000         Foggy         50 0000         1 5 204444													
55364 2012-02-03 210 00 00 00 Foggy snow -10 000000 -16 150000 0 84 12 8800 20 0 12880 0 1028 10 Foggy starting in the m continuing Foggy starting in the m continuing Continuin	55362		Foggy	snow	-10.000000	-16.150000	0.84	12.8800	10.0	2.5760	0.0	1028.10	Foggy starting in the morning continuing until
55365 2012-02-03 22 00 00 000 Foggy snow -10 00 0000 -16 686667 0.84 11.270 20 1.2880 0.0 1028.20 Foggy starting in the m continuing	55363		Foggy	snow	-10.033333	-15.861111	0.85	11.7530	18.0	2.3828	0.0	1028.09	Foggy starting in the morning continuing until
+0100 F0999 Snow -1000000 U84 11.2700 20.0 1.2880 U.0 1028.20 Continuing	55364		Foggy	snow	-10.000000	-16.150000	0.84	12.8800	20.0	1.2880	0.0	1028.10	Foggy starting in the morning continuing until
	55365		Foggy	snow	-10.000000	-15.666667	0.84	11.2700	20.0	1.2880	0.0	1028.20	Foggy starting in the morning continuing until
70100	55366	2012-02-03 22:00:00.000 +0100	Foggy	snow	-9.950000	-15.394444	0.85	10.6421	16.0	1.4329	0.0	1028.00	Nah

#### 3. View the top 10 rows of the dataset.

	Formatted Date	Summary	Precip Type	Temperature (C)	Apparent Temperature (C)	Humidity	Wind Speed (km/h)	Wind Bearing (degrees)	Visibility (km)	Loud Cover	Pressure (millibars)	Daily Sun
0	2006-04-01 00:00:00.000 +0200	Partly Cloudy	rain	9.472222	7.388889	0.89	14.1197	251.0	15.8263	0.0	1015.13	Partly cloudy throu th
1	2006-04-01 01:00:00.000 +0200	Partly Cloudy	rain	9.355556	7.227778	0.86	14.2646	259.0	15.8263	0.0	1015.63	Partly cloudy throu th
2	2006-04-01 02:00:00.000 +0200	Mostly Cloudy	rain	9.377778	9.377778	0.89	3.9284	204.0	14.9569	0.0	1015.94	Partly cloudy throu th
3	2006-04-01 03:00:00.000 +0200	Partly Cloudy	rain	8.288889	5.944444	0.83	14.1036	269.0	15.8263	0.0	1016.41	Partly cloudy throu th
4	2006-04-01 04:00:00.000 +0200	Mostly Cloudy	rain	8.755556	6.977778	0.83	11.0446	259.0	15.8263	0.0	1016.51	Partly cloudy throu th
5	2006-04-01 05:00:00.000 +0200	Partly Cloudy	rain	9.222222	7.111111	0.85	13.9587	258.0	14.9569	0.0	1016.66	Partly cloudy throu th
6	2006-04-01 06:00:00.000 +0200	Partly Cloudy	rain	7.733333	5.522222	0.95	12.3648	259.0	9.9820	0.0	1016.72	Partly cloudy throu th
7	2006-04-01 07:00:00.000 +0200	Partly Cloudy	rain	8.772222	6.527778	0.89	14.1519	260.0	9.9820	0.0	1016.84	Partly cloudy throu th
8	2006-04-01 08:00:00.000 +0200	Partly Cloudy	rain	10.822222	10.822222	0.82	11.3183	259.0	9.9820	0.0	1017.37	Partly cloudy throu
9	2006-04-01 09:00:00.000 +0200	Partly Cloudy	rain	13.772222	13.772222	0.72	12.5258	279.0	9.9820	0.0	1017.22	Partly cloudy throi

4. Showing the mean -average value,

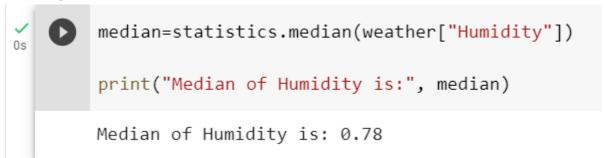
```
[14] import statistics

mean=statistics.mean(weather["Humidity"])

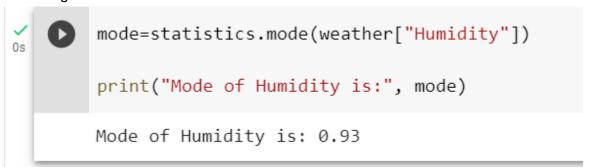
print("Mean of Humidity is:", mean)

Mean of Humidity is: 0.7312608593566565
```

5. Showing the median - middle value,



6. Showing the mode value



7. Showing the Standard deviation value

