BYOD CA 2 **ROLL NO:**

SET1

Q.1 We have received data from Indian embassy regarding people Height, Weight and Age. For analyzing we have taken only first 10 rows of dataset so as to predict weight for 11th ID.
If our prediction model would give somewhat accurate result then embassy can impute NULL values of weight with our predicted output.

A. So, build a predictive model for predicting the weight of ID 11
B. Also mention percentage of accuracy, your model would be providing to predict weight.

ID	HEIGHT (Inches)	AGE (Years)	WEIGHT (KGs)
1	5	45	77
2	5.11	26	78
3	5.6	30	55
4	5.9	34	88
5	4.8	40	50
6	5.8	36	78
7	5.3	19	40
8	5.8	28	70
9	5.5	23	45
10	5.6	32	58
11	**5.5**	**38**	**???**

Q.2 Build a predictive model from the given tennis dataset.

A. You should plot the model.
B. Show the Confusion Matrix for the same
C. Show the Accuracy of the model
D. Predict whether the student can play on the tennis or not, during hot, low windy sunny day when humidity is at its top.

Day	Outlook	Temperature	Humidity	Wind	PlayTennis
D1	Sunny	Hot	High	Weak	No
D2	Sunny	Hot	High	Strong	No
D3	Overcast	Hot	High	Weak	Yes
D4	Rain	Mild	High	Weak	Yes
D5	Rain	Cool	Normal	Weak	Yes
D6	Rain	Cool	Normal	Strong	No
D7	Overcast	Cool	Normal	Strong	Yes
D8	Sunny	Mild	High	Weak	No
D9	Sunny	Cool	Normal	Weak	Yes
D10	Rain	Mild	Normal	Weak	Yes
D11	Sunny	Mild	Normal	Strong	Yes
D12	Overcast	Mild	High	Strong	Yes
D13	Overcast	Hot	Normal	Weak	Yes
D14	Rain	Mild	High	Strong	No

Q.3 During Recession of 2019 automobile sector is facing huge loss as sales of cars are falling day by day.

So ABZ CAR Authorized Dealers wants to have more sales of their product then other dealers of the same product and also, they want more sales from other rival brands. So, they require full information of cars even if manufacturer haven't them that level of information.

This would help them to know more about their product cons and pros and also, they would be knowing the product of other rivalries with their pros and cons and hence they can develop their advertisement strategy accordingly, so as to achieve sales during market fall.

DATASET: [mtcars]

1. Build a predictive model for finding the product is of Manual Transmission or Automatic Transmission.
2. Visualize your model Accuracy with Naïve Bayes and Decision Tree and recommend the best model to clients.

BYOD CA 2 **ROLL NO:**

SET 2

Q.1 Build a predictive model from the given tennis dataset.

A. You should plot the model.
B. Show the Confusion Matrix for the same
C. Show the Accuracy of the model
D. Predict whether the student can play tennis or not, during strongly windy rainy day and having normal temperature with high humidity.

Day	Outlook	Temperature	Humidity	Wind	PlayTennis
D1	Sunny	Hot	High	Weak	No
D2	Sunny	Hot	High	Strong	No
D3	Overcast	Hot	High	Weak	Yes
D4	Rain	Mild	High	Weak	Yes
D5	Rain	Cool	Normal	Weak	Yes
D6	Rain	Cool	Normal	Strong	No
D7	Overcast	Cool	Normal	Strong	Yes
D8	Sunny	Mild	High	Weak	No
D9	Sunny	Cool	Normal	Weak	Yes
D10	Rain	Mild	Normal	Weak	Yes
D11	Sunny	Mild	Normal	Strong	Yes
D12	Overcast	Mild	High	Strong	Yes
D13	Overcast	Hot	Normal	Weak	Yes
D14	Rain	Mild	High	Strong	No

Q.2 Classify the inbuilt “ChickWeight” data according to the Diet of each ChickWeight also predict the data for the same by using naïve bayes and Decision tree classifier to compare the performance.

DATASET: [ChickWeight]

Q.3 During Recession of 2019 automobile sector is facing huge loss as sales of cars are falling day by day.

So ABZ CAR Authorized Dealers wants to have more sales of their product then other dealers of the same product and also, they want more sales from other rival brands. So, they require full information of cars even if manufacturer haven’t them that level of information.

This would help them to know more about their product cons and pros and also, they would be knowing the product of other rivalries with their pros and cons and hence they can develop their advertisement strategy accordingly, so as to achieve sales during market fall.

DATASET: [mtcars]

1. Build a predictive model for finding the product Mileage (Mpg).
2. Visualize your model Accuracy and also plot the model.