ML Assignment

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Ques 3 Gaussian Naive Bayes

- 1) Implementation is in the python file
- 2) Evaluation Metrics

Accuracy 0.9814814814815

Confusion Matrix

[[23 0 0] [1 18 0] [0 0 12]]

F1-score 0.9753639417693168

Classwise F1 score value Class 0 0.9787234042553191 Class 1 0.9473684210526315 Class 2 1.0

The model gives good enough accuracy.

3) For inbuilt model, the values of each evaluation metric come out to be same

Accuracy 0.9814814814815

Confusion Matrix [[23 0 0] [1 18 0] [0 0 12]]

F1-score 0.9753639417693168

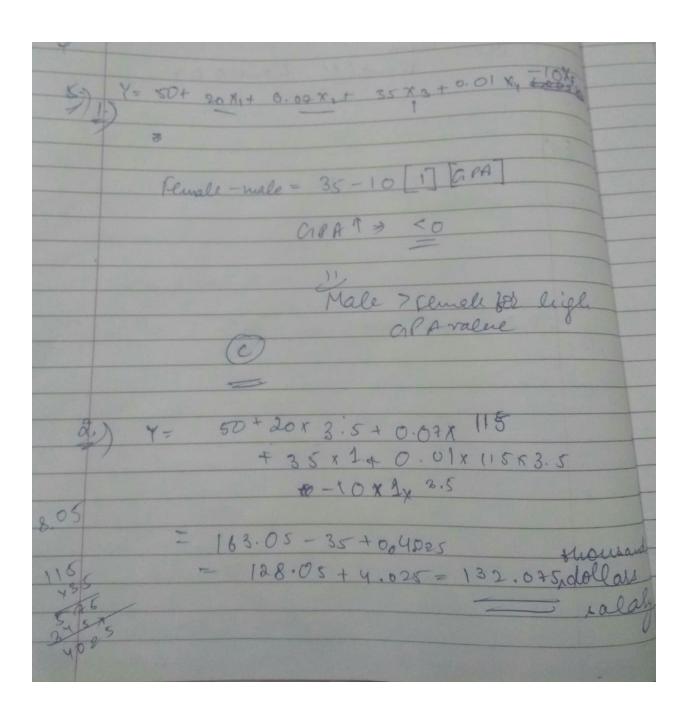
Classwise F1 score value Class 0 0.9787234042553191 Class 1 0.9473684210526315 Class 2 1.0

Matches with the implementation

Ml Adigment 4.) Meansqualled elsot = ETE In = /2 (x-xp) (x-xp) = (YT-BTYT) (Y-XB) /m = / (YTY - BTXTY + B XTXB - YTXB) = > (YTY-2 BTXTY + BTXTXB) = 7 MSE=0 = /2 (0-2×TY + 2 XTX B) E (X X) (X TOY) =(X T X) - (X TY)

kxk (kxt) (kxm) (mx1) Guditions:

Ly X X & muestible for solution of



False since the "Intelgedon town (CIPA multiplied by 1Q) can be large and the smaller coefficient when multiplied with this glodust value will send in a good amount of contribution.