**LAB # 04**

**SUPERVISED LEARNING (NAÏVE BAYES ALGORITHM)**

**OBJECTIVE**

Implementing supervised learning, Naïve Bayes algorithm for training, testing and classification.

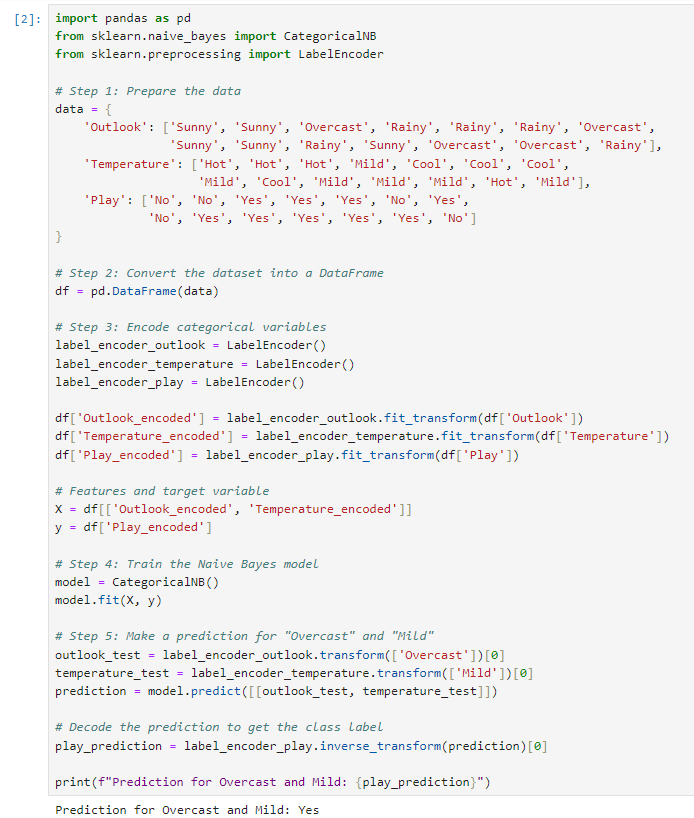
**Lab Tasks:**

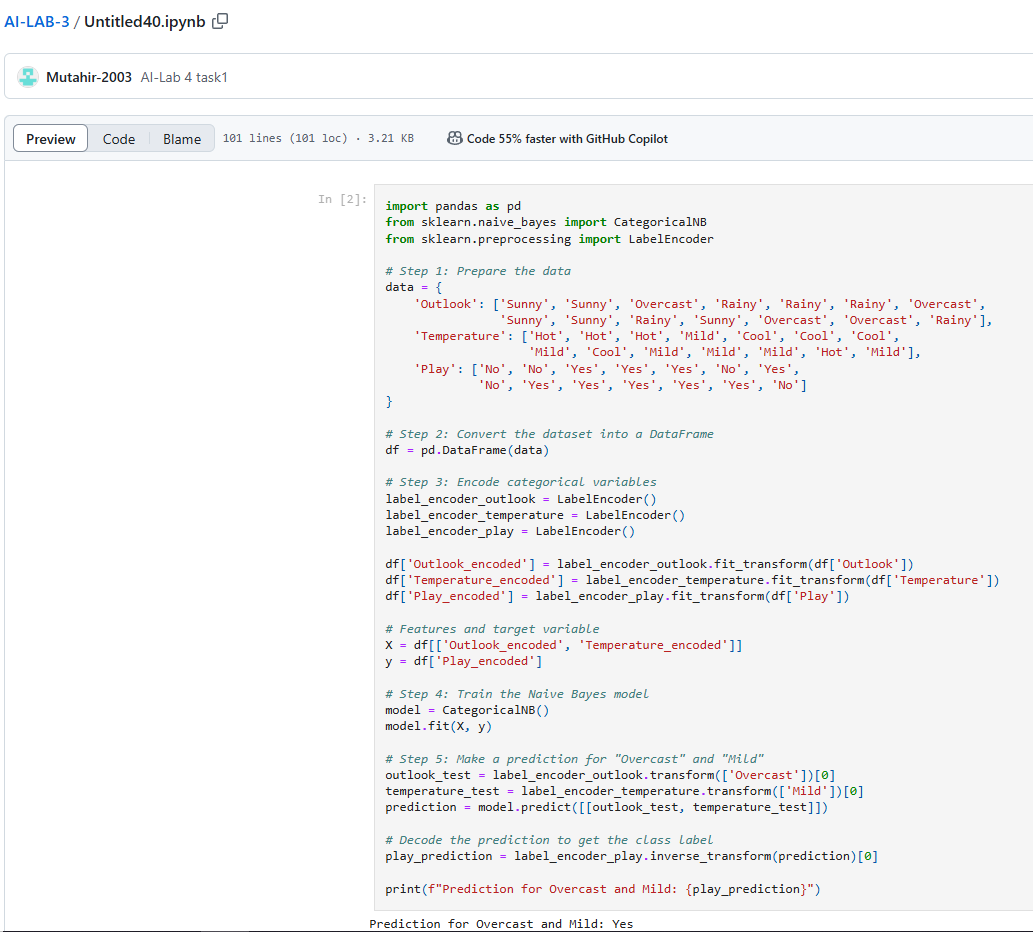
**Weather Temperature Play**

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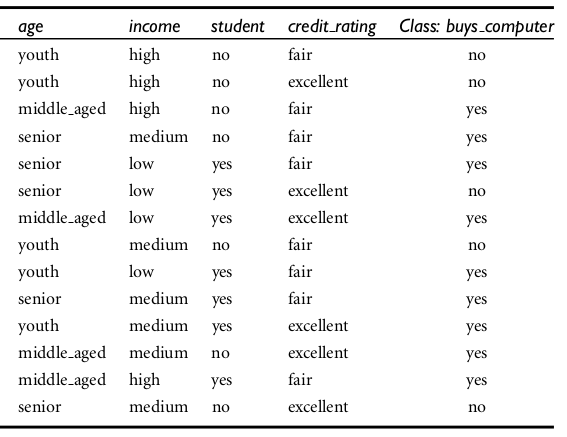
#### Fig 1

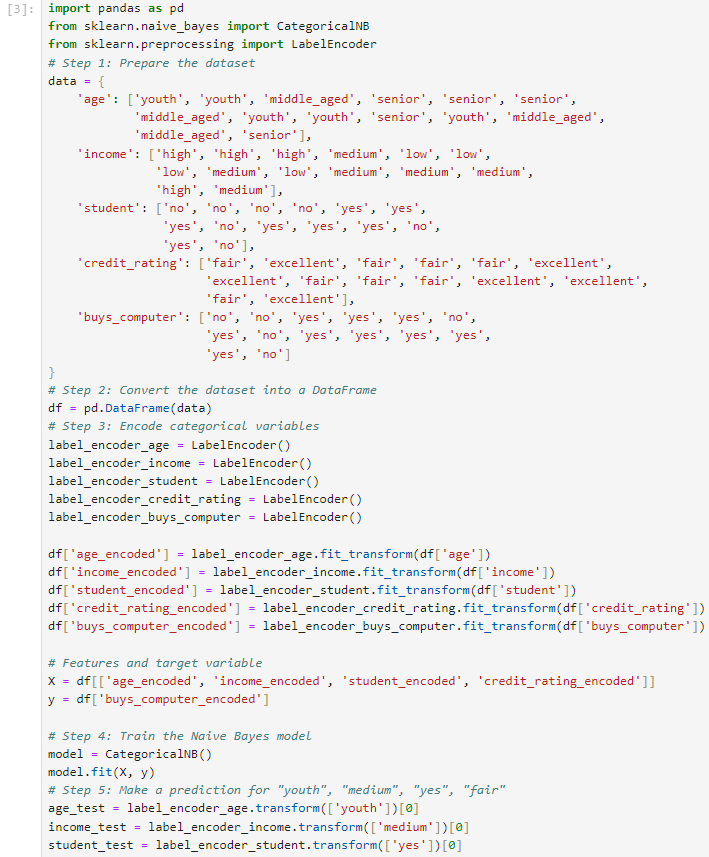
1. Implement Naïve Bayes Algorithm on the above dataset in Fig 1 to predict whether the players can play or not when the weather is overcast and the temperature is mild.

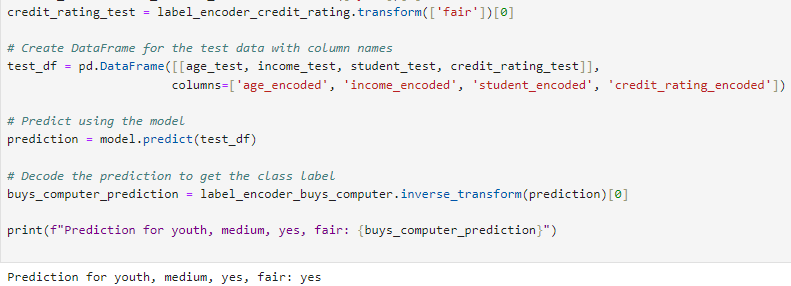




1. Consider the following dataset. Implement Naïve Bayes Algorithm to classify youth/medium/yes/fair**.**







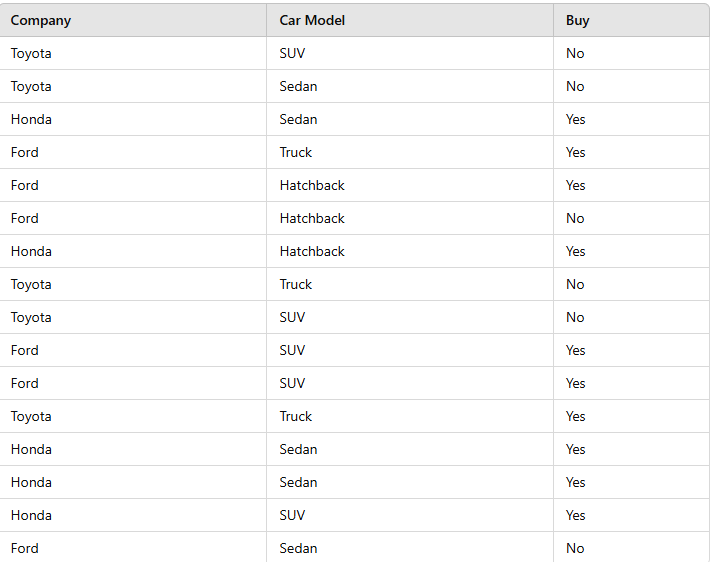


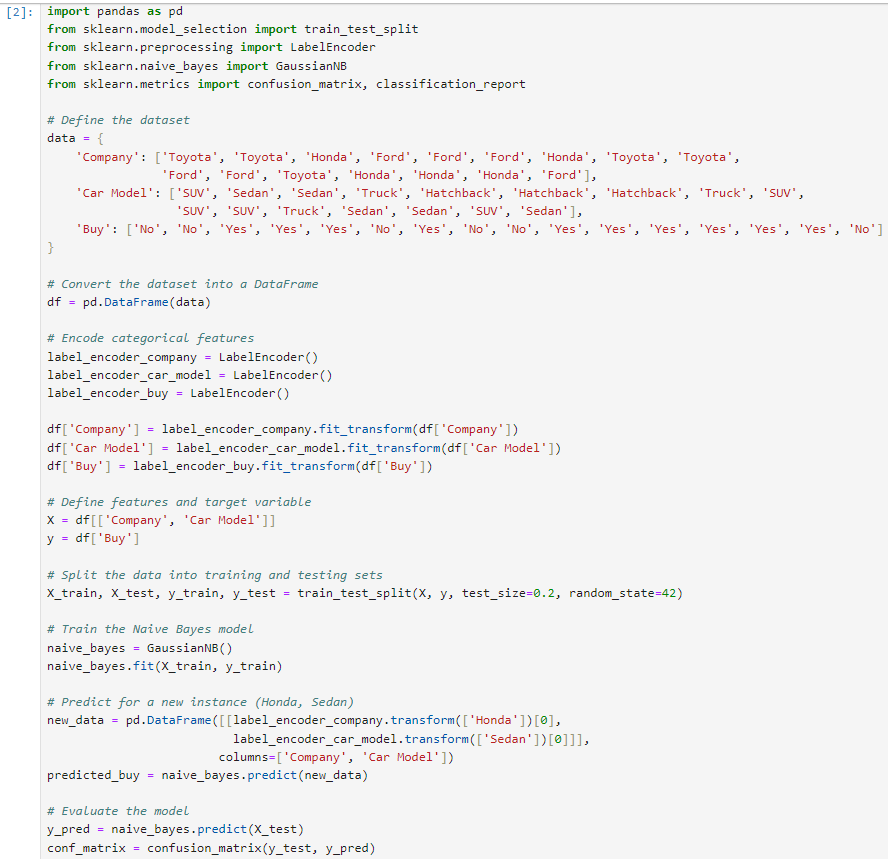


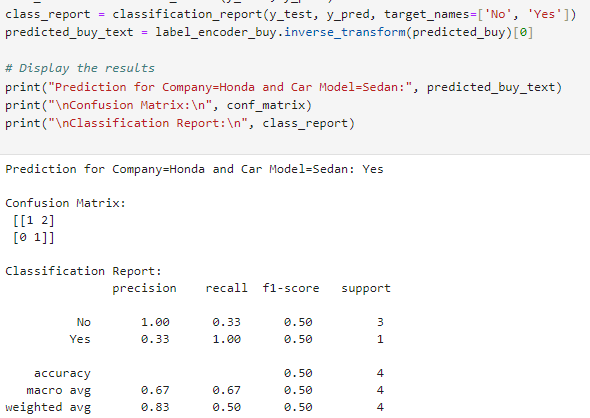


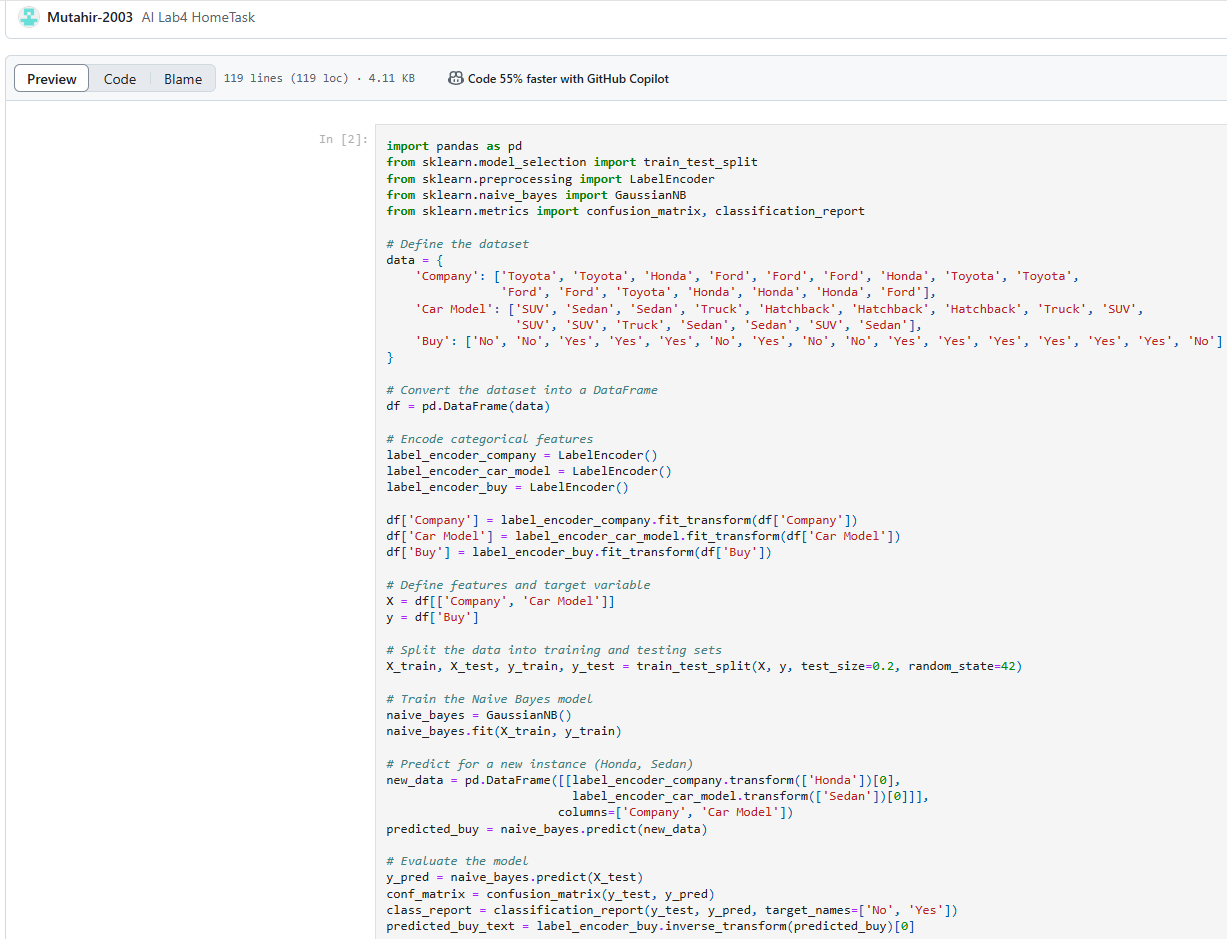
1. **Home assignment**

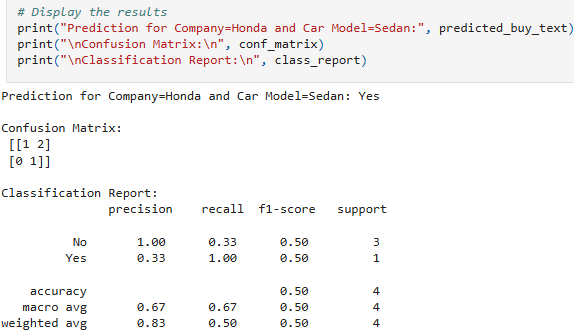
**Q :** Using the Naïve Bayes Algorithm, for the below given data set predict whether a customer will buy a car when the company is "Honda" and the car model is "Sedan."Also give confusion matrix.







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