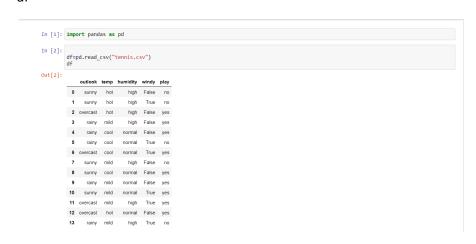
U18ISI6204 – Machine Learning Techniques LAB EXPERIMENT- 7

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Write a program to implement the naïve Bayesian classifier for a sample training data set stored as a .CSV file. Compute the accuracy of the classifier, considering few test data sets.

import pandas as pd
df=pd.read_csv("tennis.csv")
df



```
X_train = pd.get_dummies(df[['outlook', 'temp', 'humidity', 'windy']])
y_train = pd.DataFrame(df['play'])
print(X_train.info())
print(X_train.head())
```

print(y_train.info())

print(y_train)

from sklearn.naive_bayes import GaussianNB

classifier=GaussianNB()

classifier.fit(X_train,y_train)

classifier.score(X_train,y_train)

X_train.head()

classifier.predict([[True,0,0,1,0,1,0,1,0]])

```
In [7]: from sklearn.naive_bayes import GaussianNB classifier-GaussianNB() cla
```

```
y_train.head()
a=classifier.predict([[True,0,0,1,0,1,1,1,1]])
if(a[0]=="yes"):
    print("yOU CAN PLAY!!!!")
else:
    print("You cant play!!!")
```

```
In [9]: y_train.head()

Out[9]:

play
0 no
1 no
2 yes
3 yes
4 yes

In [10]: a=classifier.predict([[True,0,0,1,0,1,1,1,1]])

C:\Users\dhars\anaconda3\lib\site-packages\sklearn\base.py:450: UserMarning: X does not have valid feature names, but GaussianN warnings.warn(
In [11]: feated with feature names
warnings.warn(
In [11]: print("You CAL PLAY!!!!")
else:
    print("You Cant play!!!")

You cant play!!!")
```