**Experiment 5**

**Student Name: Jitesh Kumar UID: 20BCS2334**

**Branch: CSE Section/Group: 903- A**

**Semester: 5th Date of Performance: 28/09/2022**

**Subject Name: Machine Learning Lab Subject Code: 20CSP-317**

1. **Aim/Overview of the practical:**

Implement Naïve Bayes on any dataset.

1. **Code and Output:**

**#Harsh Pratap Singh**

**#20BCS5370**

**from sklearn.datasets import load\_iris**

**from sklearn.model\_selection import train\_test\_split**

**from sklearn.naive\_bayes import GaussianNB**

**X, y = load\_iris(return\_X\_y=True)**

**X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.2, random\_state=0)**

**gnb = GaussianNB()**

**nb = gnb.fit(X\_train, y\_train)**

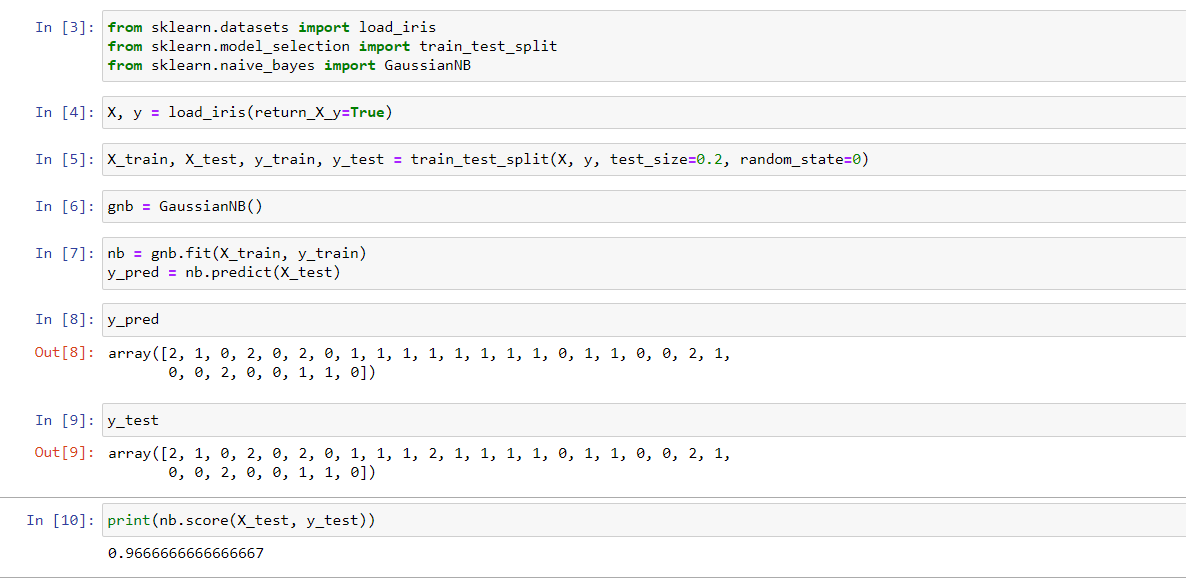
**y\_pred = nb.predict(X\_test)**

**y\_pred**

**y\_test**

**print(nb.score(X\_test, y\_test))**

1. **Result/Output:**

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**Learning outcomes:**

1. Understood implementation of Naïve Bayes.

**Evaluation Grid:**

| **Sr. No.** | **Parameters** | **Marks Obtained** | **Maximum Marks** |
| --- | --- | --- | --- |
| **1.** | **Student Performance (Conduct of experiment) objectives/Outcomes.** |  | **12** |
| **2.** | **Viva Voce** |  | **10** |
| **3.** | **Submission of Work Sheet (Record)** |  | **8** |
|  | **Total** |  | **30** |