EXP NO: 10	NAIVE BAYES ALGORITHM
DATE: 03/05/2023	

Aim:

To write a program to implement Naive Bayes algorithm in python and to display the result.

Algorithm:

1. Import the dataset using csv.reader() and append it to the list

2. Calculate the no. of attributes in the dataset and store it in a variable.

3. Recieve the query instance from the user or initialize it within the program as a list.

4. Count the total no. of positive and negative instances & store it in seperate varialbes.

5. Calculate the overall possibilities (both +ve & -ve) of the dataset.

6. Create two seperate varialbes to store the final Naive Bayes probability. Initialize them with the overall probability

$$NB\text{-}pos \leftarrow overall\_pos$$
$$NB\_neg \leftarrow overall\_neg$$

7. For every attribute value of the given query instance, calculate the probability using Bayes theorem.

$$NB\_pos \leftarrow NB.pos * value$$
$$NB\_neg \leftarrow NB\_neg * value$$

8. Display the result.