

Using the following dataset and the k-Nearest Neighbors (KNN) algorithm, predict whether a new student will Pass or Fail an exam based on the number of study hours and sleep hours.

Student	Study Hours	Sleep Hours	Result
Student 1	2	8	Failed
Student 2	3	7	Failed
Student 3	4	6	Failed
Student 4	5	7	Passed
Student 5	6	8	Passed
Student 6	7	6	Passed
Student 7	8	5	Failed
Student 8	9	7	Passed
Student 9	10	8	Passed
Student 10	11	6	Passed

Using the weather dataset below and the Naïve Bayes classifier, predict whether we should play outdoor sports (Play = Yes or No) for a new day with the following features:

	Outlook	Temperature	Humidity	Windy	Play
1	Sunny	Hot	High	False	No
2	Sunny	Hot	High	True	No
3	Overcast	Hot	High	False	Yes
4	Rainy	Mild	High	False	Yes
5	Rainy	Cool	Normal	False	Yes
6	Rainy	Cool	Normal	True	No
7	Overcast	Cool	Normal	True	Yes
8	Sunny	Mild	High	False	No
9	Sunny	Cool	Normal	False	Yes
10	Rainy	Mild	Normal	False	Yes
11	Sunny	Mild	Normal	True	Yes
12	Overcast	Mild	High	True	Yes
13	Overcast	Hot	Normal	False	Yes
14	Rainy	Mild	High	True	No