

1. What assumptions about the data do we make when we model the data using a Gaussian distribution?
 - a. **That the data is already discrete and that the data can be grouped in logical bins.**
2. When do you expect that a Gaussian will work well and when do you think it will not work well?
 - a. **From the testing of this experiment it seems to work mostly with this music experiment, but I would not say it works great. It would not work very well at all when the data is linear.**
3. What values of k work best for the kNN classifier?
 - a. **Values that do not have very large variance**
4. Based on your results from this assignment, which classifier (Gaussian or kNN) works best for the task of Music Genre Classification?
 - a. **Gaussian seems to work the best**
5. Why do you think each classifier performed as well (or as poorly) as it did?
 - a. **Gaussian works out well when the data is in a common pattern and easily repeatable. It did have a fairly large error rate, kNN does not fair well when the data is spread out as much as the songs where.**
6. Can you think of ways that you can modify the classifiers so that you might improve performance?
 - a. **I think tweaking the formula to possibly exclude some of the data points may lead to less overlapping of the song types, and thus lead to a more accurate guessing of song type.**