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Classification
Exercises

Exercise 1.
For the classification experiment on the digits dataset, compute the largest class baseline.

Exercise 2.
For the classification experiment on the digits dataset, plot the confusion matrix of the resulting classifier.

1. What is a confusion matrix? A matrix showing the specifity and sensibility. It shows which labels are correctly and wrronlgy classified
2. How is it helpful, compared to accuracy? more detailed than accuracy because we can see which label has the most "problems"
3. What does an entry a_{ij} of the confusion matrix mean? i is the actual labeland j the predicted
4. Which digits are always predicted correctly in the test data? 0 and 3
5. If a digit is predicted as 7, how likely is it to be actually a 7? 98.7%
6. How can we determine the accuracy from the confusion matrix? add all the values from the diagonal by the ones outside of it