16ML Hyperparameter Quiz

1. What is the difference between a hyperparameter and a parameter?

2. What are some examples of hyperparameters that we have learned so far?

3. What happens to training error as λ is increased in Ridge Regression?

4. What are some examples of hyperparameter tuning methods?

5. What is Grid Search?

6. What is Random Search?

7. When is Random Search better than Grid Search?

8. Why are hyperparameters hard to tune?

9. Are some hyperparameters in the same model more important than others?

10. Suppose we have created a classifier that requires us to tune its learning rate and ridge weight. This model is completely new to us, so we don't have a good understanding of what these values should be set to. Describe a method that will get us well tuned hyperparameters while keeping a modest run time.