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<div align="center">Assignment 4</div>

1. This first one is an example of a singleton pattern. In this they only want a single connection to the database. If there was more than one, there would be multiple databases, which is not the intention. This pattern is good for when you only want one instance

2. This is an example of factory patterns. It creates a specific number of methods that it can work with, and if an object is created that doesn't fall into those methods, it is rejected. This pattern is used to get an instance of the right method.

3. This one is the observer pattern. In this code the observers are the investors. When the stock price changes it alerts all of the observers. This pattern is nice when you have a lot of dependents, and you need to update all of their code when something changes in the base class.

4. This last example is the strategy pattern. It allows the user to pick which strategy they want to use on the fly. In this example the user picks which sorting method they want to use. The Sorter method is the context