

1. A web application uses a database to get Employee data. The application could use the database API directly, but this would result in several low-level SQL calls scattered throughout the code (setting the connection, building queries, extracting results, building Employee objects, etc.). Explain how you can design the application so that it is not directly dependent on the database used, and so getting and setting employee data won't be such a pain.
 - a. I would design the application by using the Adapter pattern and creating a new class called employeeAdapter and then make a subclass off of employeeAdapter that would connect to the database and use functions get and set to extract employee data. With getting the database API this handles it in a nicer way because it will not directly call it but will use the new class employeeAdapter to connect to the database to get or set employee data. Hence completely eliminating the direct dependency on the database.