**Question 2:** Describe your approach to optimizing a backend application for high performance and scalability, especially in the context of IoT-enabled applications. What strategies and techniques would you employ?

Answer:

Standard Architecture:  
The code should be sectioned into smaller sections using a standard model. Such as sectioning into routes, controllers, models and migrations with appropriate name to allow easy locatrion of a code section.

Standard Database:

Choosing a database system that can accommodate the needs of IoT data retrieval and storage. No SQL database such as MongoDB or SQL Databse such as POSTGRESQL or MYSQL can be used.

Validations and authentications:

Standard and latest methods should be used for input validations using manual methods or php packages such as Symfony Validator. Authentications such as JWT and OAUTH should also be done using the updated version.

Password hashing and encryption:  
Passwords must be Hashed properly beofre storage to confirm the security of users data.

Proper automated tests writing:  
Writing automated tests to confirm all checks and validations are working properly.

Documentation:

Recording the deployment procedures, architecture, and APIs. This makes it easier for team members to work together and helps newcomers grasp the system.