1. Research the SOLID principles of Object-Oriented Programming (OOP) as introduced by Robert Martin

The SOLID principles of Object-Oriented Programming (OOP) were introduced by Robert Martin to help developers create software that is easy to maintain and extend over time. The five SOLID principles are:

Single-responsibility Principle (SRP): A class should have only one reason to change, which means it should have only one responsibility.

Open-closed Principle (OCP): A class should be open for extension but closed for modification. This means that new functionality should be added by adding new classes, rather than modifying existing ones.

Liskov Substitution Principle (LSP): Subtypes should be substitutable for their base types. This means that objects of a superclass should be able to be replaced with objects of a subclass without affecting the program.

Interface Segregation Principle (ISP): Clients should not be forced to depend on methods they do not use. This means that interfaces should be small and focused on a specific task.

Dependency Inversion Principle (DIP): High-level modules should not depend on low-level modules. Instead, they should depend on abstractions. This means that code should depend on abstractions, not on concrete implementations.

https://www.digitalocean.com/community/conceptual-articles/s-o-l-i-d-the-first-five-principles-of-object-oriented-design

2. What are wildcards in MySQL? How are they useful?

In MySQL, wildcards are special characters that can be used to match one or more characters in a string. The two main wildcards in MySQL are the percent sign (%) and the underscore (_).

The percent sign (%) can be used to match any number of characters, including zero characters. For example, the pattern 'a%' would match any string that starts with the letter 'a'.

The underscore (_) can be used to match exactly one character. For example, the pattern 'c_t' would match any string that begins with C and ends with T such as cat, cut, or cot.

Wildcards are useful when searching for patterns in strings or when selecting data from a database based on certain criteria. For example, you could use the LIKE operator with a wildcard to search for all strings that contain a certain substring, or you could use wildcards in a WHERE clause to filter results based on a pattern.

https://www.w3schools.com/mysql/mysql_wildcards.asp#:~:text=MySQL%20Wildcards,-%E2%9D%AE%20Previous%20Next&text=A%20wildcard%20character%20is%20used,specified%20pattern%20in%20a%20column.

3. What is your favorite thing you learned this week?

I really enjoyed setting up a connection to a Schema. I know it's elementary for MySQL but it's fundamental for websites to run which I've used basically my entire life. Its great to finally see what the building blocks look like and how they're implemented.