

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

- Single Responsibility - a class should only have 1 responsibility or 1 reason to change. If you need to add features or a new behavior you should add another class to handle that
- Open/closed- this states that your classes, modules, functions etc should be open for extension but closed for modification. So you should be able to extend a class behavior without modifying it
- Liskov Solution- Derived or child classes must be substitutable for their parent or base classes. Any class that is a child of a parent class should be usable in place of its parent without any unexpected behavior.
- Interface Integration- do not force any client to implement a interface that is irrelevant to them. Don't make large interface that includes everything instead make a bunch of smaller ones that only do a specific thing.
- Dependency Inversion- High level modules or classes should not depend on abstractions and abstractions should not depend on the details. The details should depend upon abstractions. If class A changes class B should be unaffected.

2. What are wildcards in MySQL? How are they useful? They are characters used to search for data. Example (WHERE name LIKE %a) will give you any value that begins with a.

<https://www.geeksforgeeks.org/solid-principle-in-programming-understand-with-real-life-examples/>

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.