8. Tell me about check constraints: What are they? What are they good for? What's the advantage of putting that sort of thing inside the database? Make up some examples of good uses of check constraints and some examples of bad uses of check constraints. Explain the differences in your examples and argue your case.

Check constraints help enforce data integrity by restricting the values that are accepted in certain columns or multiple columns. The check constraint applies a logical condition, that returns true or false, to check the value being submitted. If the condition is returned as false, meaning that the value does not satisfy the check constraint, the record violates the constraint and the value is not entered.

A good example of using check constraints would be when you are considering product numbers. To avoid replications of products, a check constraint (unique) can be used to check that the value of the product number is unique throughout the table.

A bad example of using a check constraint would be placing an unreasonable limit on the amount of characters one can input. For example, an address. If someone were to restrict that character count to 10, it would cut off if the address were to be '85 Sunset Ave.' When an address is cut off, the address is inaccurate. This is a huge factor if this data and check constraint is used for a company such as UPS or FedEx, when the accurate address is needed. The point of the check constraint is to enforce data integrity, in this example it hinders it.