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Week 1 Case Study

A software engineer gains a few advantages by using the Command Line Interface rather than an integrated development environment. Learning SQL in the CLI pushes the engineer to understand the language at a more comprehensive level, including envisioning relationships in the database without having to look at a diagram. Second, the CLI is lightweight, and more universal. Finally, it allows easier scripting and automation of queries.

The coder who knows the language at a base level and is able to input commands and queries without an IDE to autofill and correct him will be more proficient and independent in his work. He will be able fix errors based on the error messages faster and make fewer mistakes in the first place. Fewer mistakes means less time going over the same code, and therefore is more productive.

The Command Line is built into any operating system, so a coder who is comfortable with the CLI will be able to work on the database from any computer or interface, compared to a coder who needs the IDE to be productive in his work.

The CLI also allows easier automation of commands and queries through scripting and use of other coding languages along with SQL to create large, repeatable, and efficient blocks of code. Using other languages such as Python allow the coder to create a consistent and accurate query or command that can be used by others or himself later in the future with minimal learning curve.