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According to the MySQL website, the available supported constructs are "IF, CASE, ITERATE, LEAVE, LOOP, WHILE, AND REPEAT". Conditionally, it allows for the "RETURN" construct, which only occurs in a "stored function". The "IF" statement, which is separate from the "IF" function, can be described as a Boolean gate. If what the search condition is looking for is found, then the code executes. If this is not the case, then an "ELSE" can be executed, as an extension of the "IF". Since this is a "flowcontrol construct" it can be nested, which allows for multiple "IF"s to be stuck inside each other to perform more complex queries. "CASE" functions similarly to the java equivalent, using a system of different "WHEN" conditions to attempt to match the data input, which when matched, results in a "THEN" condition. The null value cannot be used in this operation, as null automatically equivocates to false. "Iterate" simply iterates, there is not much more to be explained than it loops the block again. "Leave" is slightly more complicated, as it is contextual. Whatever condition leave is used in application of, it will leave, until it is used on the base of the program, in which "Leave" will leave the program, exiting it. "Loop" is easy to understand, as it was well explored during the java portion of the course. It is a conditional construct that can be built upon to house more complex blocks of data, but must be terminated, otherwise a potential infinite loop could result which could result in a crash. The condition for termination, which must be both included and specified, will end the loop. While the loop is active, it will execute a block of data that as well can be specified.

Wildcards in SQL are a class of variable characters used to substitute data in conjunction with a relevant operator to parse specific data through queries, easily understood as escape character equivalents. Available wild cards are "%, _, [], ^, -" which represent varying restrictions on search functions. For example; the "^" is a NOT wild card, which would result in a query returning "Tim" but not "Tom" if "T[^o]mz" were used. The addition of the brackets, its own wild card character, shows that "^" is used in conjunction with the "[]" wild card. There are more examples of this, but to keep it short, the wild card characters, and some times necessarily, are used together.

REFERENCES

https://dev.mysql.com/doc/refman/8.0/en/flow-control-statements.html

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