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Java DataBase Connectivity is a type of API, or “application programming interface”, according to IBM. This is a type of bridge between Java, and database structured query language, which functions as a method for connecting the two. If a relevant database driver exists, Java will be able to communicate with said database using the JDBC API via connecting to a database management system. The application of the JDBC streamlines the process of query implementation by allowing the database manager to be interacted with remotely via the IDE of choice. It is not SQL, it allows for Java, and SQL to exist in the same medium, similar to a driver, and allows for utilization of both in the same environment if proper syntax and isolation are utilized. This allows for testing, and catches to be implemented before a query can be pushed. This can be extremely useful, as Java will maintain composure and not self destruct the project if an error occurs, unlike SQL. This cooperation of languages allows Java to function as a safeguard for the SQL, further increasing effectiveness of the JDBC.

In JDBC, I gather there are eight different main classes. The “DriverManager, the Driver, the Statement, the PreparedStatement, the CallableStatement, the Connection, the ResultSet, the ResultSetMetaData”. The DriverManager connects to the database similar to this “DriverManager.getConnection”. CallableStatement creates a statement via “PrepareCall()”, which allows for C.R.U.D. operations. “ResultSet” allows for the processing of SQL statements via a cursor which can be called via the “.viewTable” method. This is also able to be utilized as “.next”, which further moves the cursor to process data. “Connection” closes the connection via “close()”, which is simply one of many of its functions.

## References

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