## assignment06db\_candiced

## https://github.com/practice-stuff/DBFoundations

## ASSIGNMENT 06 WRITEUP

INTRO

This module focused on manipulating reporting views to present relationships between tables in a dataset to viewers while leaving the dataset itself secure and untouched.

SQL VIEWS

Views are a data extraction which can be saved, altered, and reused without disturbing the underlying tables that they retrieve data from; They are also very important for maintaining data consistency since an administrator has the power to only make views of the current data available to read while restricting the actual tables themselves.

VIEW/FUNCTION/SPROC

Views are named queries stored in the database server – they offer some security benefits since views can be restricted, are easily reused to make queries in objects that can be easily called from other queries and can be optimized for performance. Downside: parameters cannot be based into the view.

Functions are pre-written actions which perform specific operations on data. SQL has hundreds of predefined functions built into the language, but users can easily make their own functions to fit their needs; This is like the customization in SPROCs, but UDFs perform much simpler work than the former (and can still be re-used across multiple situations).

Stored procedures (sprocs) encapsulate query statements and return result sets. This works best to define single or multi-step processes in a single object, but these are harder to reuse elsewhere.

All aforementioned items serve to execute actions using SQL more easily, which saves users time when the same action must be applied several times to different parts of the data.

SUMMARY

This week’s lesson focused on manipulating and building off views to produce increasingly complex results, but I admittedly built some views off table data whenever I felt unsure about the question. Hopefully I will become more familiar with views and their restrictions so I can fully appreciate their utility.