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Team 20

Assignment 5 Report

Homework 5 seemed like it was going to be a lot of work, but overall it was formulaic. The most important part of this assignment was having the two functions *get_array_data()* and *write_table()*. These two functions shorten the code immensely because both of these things have to be done for almost every table being created in the database. The first function reads in the values from the text files used. These were used to generate things like first names, last names, domain names for emails, and more. This function wasn't used for every table. For instance, the last table *product_warehouse* did not need it because both of the columns were IDs. These IDs are foreign keys and sort of "point" to other tables. They didn't have to be read in from a file.

The second function was used for every table. This is what actually generated the SQL. SQL is repetitive. The most important thing about this step was to make sure I was sending the $columns in in the correct format. Number values like decimals for pricing should not be sent in with opening and closing apostrophes like String data is.

My process for each table was to create the column names, then read in any data that was needed, then take this data and generate the actual values for each column for the table. I did this for every table and was consistent with the naming ($warehouse_columns, $warehouse_values).

I don't think I would do anything different on this assignment, as it was a rather efficient process. The format for the input text files were newline delimited TXT files—I used the ones provided. I did create my own input file for the warehouse names, but I kept a consistent format so that the *get_array_data()* function would work properly on it. For most data, I just selected a random index in the array and chose that to use for whatever thing I was on. Some things, like the address_id for customer and warehouse, I did differently. Because nobody is living at a warehouse, I let the first 100 addresses belong to customers, and the next 25 addresses belong to the warehouses. Email was generated by combining the first name, the last name, and a random domain.

I surprisingly did not have a lot of obstacles in this assignment. I had a few syntax errors that were easily found and fixed after I ran the PHP file. Other problems were minor and easy to fix. I just checked the generated SQL file with my eyes and looked for things that were colored incorrectly and then went to the PHP script and fixed where the mistake was before I even tried to run it.

I have no preference towards any other method of generating SQL files because this is the first time I've ever done anything with SQL.