

# [Assignment 2- database modeling and normalization](https://assignbuster.com/assignment-2-database-modeling-and-normalization/)

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Assignment 2- Database Modeling and Normalization Dr. Amir Afzal Strayer University- CIS 515 August 7, 2012 Abstract Selling high end electronics is big business and being a commissioned employee in that field if your sales are up means bigmoney. Prices for electronics range from the low hundreds into the thousands. It really depends on the person style, specifications they are looking for, trust in the brand, and the depth of their pockets, how much a person is willing to spend for example on a that high definition led plasma television that is 52 inches.

No matter the cost, businesses want to keep a track of the sales of their employees and how much they are getting paid. In this case a high-end electronics store wants to streamline data processing to enable them to help determine the commissions paid to employees. Assignment 2- Database Modeling and Normalization Streamlining processes allows information to be available to users across the system. In order for thefinancedepartment to be able to find the commission paid to employee’s information that maybe held by other departments such as human resources will be needed.

Once the database is complete and has all the information such as: employee first and last name, employee ID, yearly salary, commission rate, department, etc, the finance department can then being to generate that information. In this case a query is designed to allow the finance department to determine commissions paid to employees of specific departments. That code will be compared to the code that would show how much total compensation is paid to each employee monthly. Lastly it will be described how Big Data could be used to assist in productivity and forecasting of organizations product and resources.

Methods After information is gathered about the employee; most of what was mentioned before, and input into the system a query can be designed to pull that information from the tables. In order to pull information from tables the SELECT function is used to determine the information that is needed and the FROM function tells from what tables to pull it (Coronel, Morris & Rob, 2012). The coding that was used to find information on commissions paid to employees was: SELECT Employee. \* FROM Employee, Invoice WHERE (DepartmentID = 2);

The asterisk next to employees indicates that all the information under the employee table was used to generate the search. In this query information was pulled from the employee and invoice tables. The WHERE function more specifically states the department which can be changed and it would generate new information. The query currently only shows employee commission information for employees who work in department two (see attachment). If the finance department wanted to find the total compensation paid to each employee in the same month as the first query a slightly different query would be run to generate that information.

The first code simply pulled the information and did not include and computation because the finance department only requested to be able to determine as in pull up the record for employee’s commission paid. The second code will include computation which will divide the yearly salary by twelve months then multiples the commission rate by the total amount of product sold and lastly add those two numbers together to get the total compensation for that month. Unfortunately the coding that I am using is not generating a proper result.

However, it should look something like this: SELECT Employee. EmpNumber, Employee. EmpFirstName, Employee. EmpLastName, Employee. YrlySalary, Invoice. InvAmount, Invoice. InvDate, Employee. CommissionRate FROM Employee INNER JOIN Invoice ON Employee. EmpNumber = Invoice. EmpNumber WHERE (DepartmentID= 2);, it is missing the computation part. Big Data could be used to assist in productivity and forecasting of organizations product and resources because it takes “ large pools of data that can be brought together and analyzed to discern patterns and make better decisions”.

It “ enhanc[es] productivity and creat[es] significant value for the world economy by reducing waste and increasing the quality of products and services (Mcguire, 2012). Additionally, Big Data adds “ value by making information transparent... “ store more transactional data in digital form”, and develop the next generation of products and services” (Mcguire, 2012). That last aspect of Big Data allows “ manufacturers are using data obtained from sensors embedded in products to create innovative after-sales service offerings such as proactive maintenance to avoid failures in new products (Mcguire, 2012).

References Coronel, C. , Morris, S. , & Rob, P. (2012). Database systems. (10th ed. ). Independence, KY: Cengage. Mcguire, T. (2012, July). Why big data is the new competitive advantage. Retrieved from http://www. iveybusinessjournal. com/topics/strategy/why-big-data-is-the-new-competitive-advantage Appendix A Appendix B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |