IST722: Class Exercise 1

**This is an individual assignment.**

**Before you begin, please make sure you’ve read and understand 1) our class honor code, 2) course policies on late work and 3) participation policies as posted on the syllabus. “I didn’t know” is not an excuse.**

**You should cite your sources in a standard format like MPA or APA and include a list of works cited.**

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# Instructions (Refer Unit 1)

Answer each of the following questions as concisely as possible. More is not necessarily better. Please justify your answer by citing your sources from the assigned readings from our textbooks, our class lectures, or online if directed to do so. Be sure to cite in text and include a list of works cited. Place your answer below each question. When you’re finished, print out this document and bring it to class as part of your participation grade.

# Questions

[1] Why is data in organizations the more important asset?

**Because it can help company understand supply and demand; It can be used multiple times for a variety of use; Information analysis by business analysts, analytical models, etc. It can make informed decisions for business organizations; It can help with getting results you want; data allows organizations to measure the effectiveness of a given strategy.**

[2] What are the 4 characteristics of a data warehouse? Provide your own novel examples of each.

**Time variant; data will change with term of time such as customer’s phone number or email address.**

**Non volatility; data will tell the story in order words; it does not change.**

**Integrated; data is aggregate from different resources.**

**Subject Oriented; domain specific such as a department within a company.**

[3] You probably noticed we made a "copy" of the data from the source system to the data warehouse. Can you think of three reasons why the data must be a copy and you cannot just use the original data?

**Maintain the historical data as the data will change over time;**

**The original data is not modified in the querying process;**

**To get the third normalized tables.**

[4] What is the difference between business intelligence and data warehouse?

**BI has many sets of tools to extract and analyze data for business decisions and DW is just a system to store and collect data from different recourses; BI can make some important use of DWs; BI is more like a frontend tool and DW is more like a backend side tool; BI contains varies of visualizations and DW consists of tables and dimensions of data.**

[5] How do Inmon and Kimball approaches to Data Warehousing differ? Be brief.

**Inmon is based on data, in lnmon, normalized data is used and the data warehouse is built up over time. Kimball is designed around BI, where requirements drive the dimensional model. Kimball is also preferred when data source is stable and Inmon is preferred when there’s high rate of change in data source. And also, Kimball is cheaper than Inmon.**