**Assignment: Introduction and Review**

1. Inmon identifies four components of the architected environment. Describe each of these in detail. What are some of the problems that led to the data warehouse? What are the two types of data?
2. Discuss in detail the differences between the operational systems and a data warehouse.
3. Explain the Day 1 to Day N phenomena and hypothesize why this should be considered when deploying a data warehouse in an organization.
4. Granularity is the first critical design element of a data warehouse. Provide a detailed discussion of granularity based on Inmon’s model in the reading assignment.
5. Partitioning is the second critical design element of the data warehouse. Provide a detailed discussion of partitioning based on Inmon’s principles including the benefits.
6. Inmon states that data is both homogeneous and heterogeneous. What does he mean in this statement? Why is this important to keep in mind when considering a data warehouse?
7. Using the fundamental components of data lakes and data warehouses, analyze your current organization or an organization with which you are familiar. Specifically address the following key points:

* Provide a brief overview of the organization. Please do not give specific company names or confidential information as part of your response.
* What operational components would provide input to the data warehouse?
* What would be the high-level granularity of your design strategy?
* How would you recommend the high-level partitioning be set up?
* What business subject areas would be covered in this design?