

Data Warehouse & Business Intelligence

Assignments

Assignment Number 1

1. Explain Front Room Architecture model of BIS.
2. Explain Backroom system architecture model
3. Explain presentation server system architecture in BIS
4. What are the infrastructure factors considerations for front room in BI system?
5. What is metadata? Explain Technical, Process and Business Metadata.
6. What are Common Architecture Features of BIS?
7. Write short note on benefits of DW/BI system

Assignment Number 2

8. Explain Factless fact tables and consolidated fact tables.
9. What is a Fact Table granularity? Explain different types of Fact Tables?
10. Explain Transaction Fact Tables, Periodic Snapshot Fact Tables and Accumulating Snapshot Fact tables
11. Describe four step Dimensional Design Process
12. Explain Role playing and Mini Dimensions.
13. Explain Snowflaking and Outriggers
14. With suitable example explain Dimension Table? Explain surrogate keys in Dimension Table

Assignment Number 3

15. Describe major participants and their roles in Dimensional Modeling Process.
16. Explain Deduplication and Conforming system in ETL process.

17. Explain steps performed in high level dimensional model during dimension modeling process
18. Explain dimensional modeling process flow.
19. What are the steps performed in reviewing and validating the dimensional model?
20. “While creating dimensional model the participants play major role”. How? Discuss & justify it.
21. Explain steps involved in building Detailed Dimensional Model.

Assignment Number 4

22. Explain Deduplication and Conforming system in ETL process
23. Explain Extract System in ETL process
24. How data profiling is done in ETL Process?
25. What are the various requirements that impact the design and development of the ETL system?
26. Explain Change Data Capture System in ETL
27. How Error event schema is used in ETL process?
28. How data profiling is done in ETL Process?

Assignment Number 5

29. Explain any two query formulation capabilities required in query tool for Business Intelligent applications?
30. How Data Mining is used in BIS?
31. Explain any two types of BI applications
32. Explain Pivoting the results and Drill down w.r.t. presentation and analytical Capabilities of query tool in BI applications
33. Explain any two technical features for BI application and Query Tools
34. What is the need of following query formulation capabilities in Query Tools?

- 35. Explain additional functionalities required for BI portal.
- 36. Explain Analytic Cycle for BI application.

Assignment Number 6

- 37. What kind of preparation is required for BI application development?
- 38. What are the three major activities in building BI APPLICATIONS?
- 39. What are the steps in creating application templates in BI application specification?
- 40. Explain Business Intelligent application resource planning
- 41. What are the set of documents required for developing report/application in BI systems?
- 42. Define user interactions w.r.t BI application development?
- 43. Explain Format results w.r.t BI application development?
- 44. How Analytic applications are used in BIS?