**Questions Set**

1. Which one of the following is a type of semi-structured data?

Relational Database

Image

Audio

XML

1. Why do we need a data warehouse?

Analytical Decision Making

Operational Data Keeping

Both A and B

None of these

1. Which type of data warehouse architecture focuses on the creation of multiple data marts instead of centralized architecture?
2. Centralized Data Warehouse
3. Federated Data Warehouse
4. Both A and B
5. None of these
6. Which one of these is not a type of Data Mart?
7. Independent
8. Dependent
9. Hybrid
10. Persistent
11. Which one of the data warehouse types supports advanced data management platforms designed to support structured and unstructured data, cloud-based architecture, and Massively Parallel Processing?
12. Traditional Warehouse
13. Modern Warehouse
14. Select all options that apply to In-Memory Databases.
15. Stores Data in main Memory
16. Stores Data on Disk Storage
17. Has a faster response time compared to traditional database
18. Durable
19. Scalable
20. Data Dictionary is a type of Metadata. True or False?
21. True
22. False
23. Which of the following best describes Bill Inmon's approach to data warehousing?
24. Bottom-up approach
25. Top-Down approach
26. Hybrid approach
27. Ad-Hoc Approach
28. What is the primary goal of Inmon's data warehousing approach?
29. To optimize query performance for ad-hoc reporting.
30. To provide a single source of truth for the organization's data.
31. To implement real-time analytics capabilities.
32. To decentralize data storage and processing.
33. Which of the following best describes the relationship between data marts and the central data warehouse in Kimball's approach?
34. Data marts are independent of the central data warehouse.
35. Data marts are subsets of the central data warehouse.
36. Data marts are built concurrently with the central data warehouse.
37. Data marts are built before the central data warehouse.
38. Which of the following best describes the purpose of the "front room" in Kimball's analogy?
39. It stores raw, detailed transactional data.
40. It serves as a staging area for data transformation.
41. It houses summarized and aggregated data for reporting.
42. It transforms and integrates data from various sources.
43. What is the primary goal of dimensional modeling in a data warehouse environment?
44. To optimize storage space by normalizing data
45. To provide a flexible and intuitive structure for querying and analysis
46. To enforce referential integrity constraints across tables
47. To streamline data loading processes through ETL automation
48. In dimensional modeling, what is a fact table?
49. A table that stores descriptive attributes of business entities
50. A table that contains numeric data representing business metrics or events
51. A table that serves as a bridge between dimension tables
52. A table that captures historical changes in dimension attributes
53. What is a star schema in dimensional modeling?
54. A schema where all tables are connected in a linear chain
55. A schema where fact tables are arranged in a circular pattern
56. A schema where fact tables are connected to multiple dimension tables
57. None of these
58. What is a characteristic of structured data sources?
59. They typically have a fixed schema.
60. They contain data in its raw, unorganized form.
61. They are commonly used for storing multimedia files.
62. They are flexible and adaptable to various data formats.
63. Which of the following best describes the purpose of a data mart?
64. To store raw, unprocessed data for archival purposes
65. To serve as a staging area for ETL processes
66. To provide a focused view of data for a specific business area or department
67. To perform complex data analysis using machine learning algorithms
68. What is metadata in the context of a data warehouse?
69. Raw data stored in its original format
70. Data used for generating reports and dashboards
71. Data about data, describing its structure, origin, and meaning
72. Summarized data used for statistical analysis
73. What is database normalization?
74. A process of reducing redundancy and improving data integrity in a database
75. A method for storing data in a non-relational format
76. A technique for increasing data redundancy to improve query performance
77. A process of converting unstructured data into structured data
78. Which SQL statement is used to retrieve data from a database?
79. FETCH
80. SELECT
81. EXTRACT
82. GET
83. Which SQL keyword is used to filter rows from a result set based on a condition?
84. WHERE
85. FILTER
86. HAVING
87. BY
88. What does the SQL statement "SELECT \* FROM Customers;" do?
89. It selects all columns from the Customers table.
90. It deletes the Customers table.
91. It selects only the first row from the Customers table.
92. It selects only the last row from the Customers table.
93. Which of the following is a characteristic of a star schema in data warehousing?
94. It consists of multiple fact tables connected in a circular pattern
95. It stores data in a highly normalized form for efficient storage
96. It organizes data into a central fact table surrounded by dimension tables
97. It allows for unstructured data storage and retrieval
98. What is the role of OLAP (Online Analytical Processing) in a data warehouse?
99. To store transactional data
100. To provide real-time data processing capabilities
101. To support complex analytical queries and multidimensional analysis
102. To manage user access and security permissions
103. What is the primary purpose of OLTP systems?
104. To support complex analytical queries
105. To manage day-to-day transactional operations
106. To store historical data for reporting and analysis
107. To perform data integration tasks
108. Which of the following is an example of an OLTP application?
109. Business intelligence dashboard
110. Online banking system
111. Data warehousing solution
112. Predictive analytics tool