ETL (Extraction Transformation & Loading) Testing Training Course Content

Data Warehousing Concepts BY Srinivas Uttaravilli

- o What are Data and Information and difference between Data and Information?
- o What is Table?
- o What is Database?
- o What is Data Warehouse?
- o Difference between Database and Data Warehouse?
- o Advantages of Data Warehouse and why we need the same?
- O What is DataMart?
- O What is the Difference between DataMart and Data Warehouse?
- o What are the approaches we have to build Data Warehouse?
- O What is top down and bottom up approach in data ware house, differences between those?
- O What are the types of Data Marts?
- o Is Data Mart first or Data Warehouse First while building the Data Warehouse?
- What is OLTP (Online Transactional Processing), when and why we need the same?
- o What is OLAP (Online Analytical Processing), when and why we need the same?
- O What are the differences between OLTP and OLAP?
- o What is Dimension Table and types?
- O What is SCD (Slowly Changing Dimension) and types?
 - ✓ SCD Type1?
 - ✓ SCD Type2?
 - ✓ SCD TYPE3?
- O How we can find Dimension tables in Real time?
- O What is Fact and how many types of Facts we have?
- O What are the Fact table and types?
- O How we can find Fact tables in Real time?
- O What is surrogate key and why we need in real time?
- O What is Start Schema?
- O What is Snowflakes Schema?
- Star Schema vs. Snowflakes Schema?
- o What is ODS (Operational Data Store)?
- OLTP Vs ODS vs Data Warehouse?
- O What is Data modelling?
- O Why should a tester know Data modelling?
- O What is Conceptual modelling?
- O What is Logical modelling?
- O What is Physical modelling?

SQL CONCEPTS BY SRINIVAS UTTARAVILLI

- O What is the Table?
- O What is the Data base? Why we need?
- Different Data bases in Market? And Differences?
- O What are the DDL, DML and DCL?
 - -DDL (Data Defamation Language)
 - ✓ CREATE
 - ✓ ALTER
 - ✓ DROP
 - ✓ RENAME
 - ✓ TRUNCATE
 - -DML (Data Manipulation Language)
 - ✓ SELECT
 - ✓ INSERT
 - ✓ UPDATE
 - ✓ DELETE
 - -DCL (Data Control Language)
 - ✓ GRANT
 - ✓ REVOKE

NOTE: Detailed level explanation with syntax

- o What are the Data types and why we need the same in Data base?
- o SQL- Operators?
- O What is Constraint and why we need?
- O What are PK and FK, How to create?
- o Useful (For ETL testing) functions in ORACLE
- O What are the aggregate functions and why we need?
- SELECT Statement usage?
- O What are the aggregate functions and why we need?
- O What are the conditions we should follow while using aggregate functions?
- O What is group by clause and why we need it?
- O What is Having Clause and why we need it?
- O What is distinct clause and why we need the same?
- o What is NULL Value?
- O What is NVL Function and why we need the same?
- O What is Row number?
- O What is Rowid? And how it is useful in real-time?
- O What is surrogate key and when we use this?

- What are COLUMN ALIASES and TABLE ALIASES? What are the differences between those? How useful these?
- o What is UNION and UNION All? And Differences? What are the prerequisites to perform the same?
- o What is JOINS? Why we need and Types?
 - ✓ INNER JOIN OR EQUE JOIN
 - ✓ LEFT OUTER JOIN OR LEFT JOIN
 - ✓ RIGHT OUTER JOIN OR RIGHT JOIN
 - ✓ FULL JOIN OR FULL OUTER JOIN
- OLAP Features
 - ✓ CASE
 - ✓ DECODE
 - ✓ RANK()
 - ✓ DENSE_RANK ()

ETL TESTING INTRODUCTION BY SRINIVAS UTTARAVILLI

- O What is ETL?
- Architecture of ETL?
- o What is ETL Testing?
- O What are the areas in ETL Architecture?
- o What is Staging area?
 - ✓ Data Merging?
 - ✓ Data Cleansing?
 - ✓ Data Scrubbing?
 - ✓ Data Aggregation?
- o What is Data model?
- O What is Design document?
- O What is mapping document? What it contains and why exactly we need it?
- What is the test plan and what are the inputs we need to give while preparing the same?
- O What is Data load and types?
- O What are the ETL Tester responsibilities?
- o What is test case?
- O What kind of scenarios we need cover while we writing the test cases?
- O What is test data? When and why it required in real-time?

Quality Center By Srinivas Uttaravilli

- o What is Quality Center and why we need?
- What are the important components in QC and how those are useful for ETL Tester?
- O What is the life cycle of test case execution?
- O What are Test plan and Test lab and differences?
- O What is Defect/Bug?
- O What is Defect life cycle management? Who are involved in?

- O What is Defect Triage meeting?
- O What are different statuses in Defect life cycle?

INFORMATICA TOOL BASIC CONCEPTS by Srinivas Uttaravilli

- o What are the ETL Development tools in Market? And why we need?
- o Components of the INFORMATICA and uses?
 - ✓ Repository manager
 - ✓ Designer
 - ✓ Workflow Manager
 - ✓ Workflow Monitor
- O How to run the job In INFORMATICA?
- O How to capture the job statics of INFORMATICA?

NOTE: Live Demo on how to Extract, Transformation and loading the data in Target tables?

Software development life cycle by Srinivas Uttaravilli

- o What is SDLC and why generally we need it?
 - ✓ Requirement phase
 - ✓ HLD (High Level Design)
 - ✓ LLD (Low Level Design)
 - ✓ Development Phase
 - ✓ Testing Phase
 - ✓ Deployment
 - ✓ Production/ Maintenance

UNIX OS and Commands by Srinivas Uttaravilli

- O What is Operating system? Types and Advantages?
- o What is UNIX/LINUX? Differences?
- o Differences between UNIX and Windows?
- O UNIX ORCHITECTURE and its components?
 - ✓ System Hardware
 - ✓ Kernel
 - ✓ Shell
 - ✓ Application layer
- o General commands in UNIX?
- o File related commands in UNIX?
- O What is Vi Editor? And different modes?
 - ✓ Command mode
 - ✓ Insert/Append Mode
 - ✓ Escape Mode

- o Various commands in VI Mode?
 - ✓ Basic cursor movement commands
 - ✓ Page commands
 - ✓ Append/Insert commands
 - ✓ Change/Delete commands
 - ✓ Misllaneous commands
 - ✓ Control commands

Real Time Best Practices by Srinivas Uttaravilli

- o Resume Preparation.
- Mock Interviews.
- o Interview Tips
- o Real-time Scenarios.
- o FAQ's