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Corporate Trainer's Profile

Corporate Trainers are having the experience of 4 to 12 years in development , working with TOP CMM level 5 companies (Project Leader /Project Manager) qualified from NIT/IT/IIM and work exp in USA and UK.



Projects

CMM (Capability Maturity Model) level Project Standard:-

The Capability Maturity Model (CMM) is a method for evaluating the maturity of organizations on a scale of 1 to 5. Get the Opportunities to work on Client Projects Of US/UK, which follow the all standard of CMM level 5 Company.



Oracle SQL — Basics – 12 hrs

Table of Contents:

Introduction Basic SELECT STATEMENT

- Review The Basic SQL SELECT Statement Syntax
- Select All Columns Using A Wildcard Notation From A Table
- State Simple Rules And Guidelines For Writing SQL Statements
- Write A Query Containing The Arithmetic Operators
- Create A Character Expression With The Concatenation Operator
- Using The Oracle SQL Developer Environment

Restricting And Sorting Data

- Limit Rows Using A Selection
- Using The WHERE Clause To Retrieve Specific Rows
- Using The Comparison Conditions In The WHERE Clause
- Use The LIKE Condition To Compare Literal Values
- List The Logical Conditions AND, OR, NOT
- Describe The Rules Of Precedence For The Conditions
- Sort Rows With The ORDER BY Clause
- Use Ampersand Substitution To Restrict And Sort Output At Run Time

Using Single-Row Functions To Customize Output

- Show The Differences Between Single Row And Multiple Row SQL Functions
- Categorize The Character Functions Into Case Manipulation And Character Manipulation Types
- Use The Character Manipulation Functions In The SELECT And WHERE Clauses
- Explain And Use The DATE And Numeric Functions
- Use The SYSDATE Function To Retrieve The Current Date In The Default Format
- Introduce The DUAL Table As A Means To View Function Results
- List The Rules For Applying The Arithmetic Operators On Dates
- Use The Arithmetic Operators With Dates In The SELECT Clause

Reporting Aggregated Data Using The Group Functions

- Describe And Categorize The Group Functions
- Use The Group Functions
- Utilize The DISTINCT Keyword With The Group Functions
- Describe How Nulls Are Handled With The Group Functions
- Create Groups Of Data With The GROUP BY Clause
- Group Data By More Than One Column
- Avoid Illegal Queries With The Group Functions
- Exclude Groups Of Data With The HAVING Clause

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Displaying Data From Multiple Tables

- Identify Types Of Joins
- Retrieve Records With Natural Joins
- Use Table Aliases To Write Shorter Code And Explicitly Identify Columns From Multiple Tables
- Create A Join With The USING Clause To Identify Specific Columns Between Tables
- Use The ON Clause To Specify Arbitrary Conditions Or Specify Columns To Join
- Create A Three-Way Join With The ON Clause To Retrieve Information From 3 Tables
- List The Types Of Outer Joins LEFT, RIGHT, And FULL
- Generating A Cartesian Product

Manipulating Data

- Write INSERT Statements To Add Rows To A Table
- Copy Rows From Another Table
- Create UPDATE Statements To Change Data In A Table

- Generate DELETE Statements To Remove Rows From A Table
- Use A Script To Manipulate Data
- Save And Discard Changes To A Table Through Transaction Processing
- Show How Read Consistency Works
- Describe The TRUNCATE Statement

Using DDL Statements To Create And Manage Tables

- List The Main Database Objects And Describe The Naming Rules For Database Objects
- Introduce The Schema Concept
- Display The Basic Syntax For Creating A Table And Show The DEFAULT Option
- Explain The Different Types Of Constraints
- Show Resulting Exceptions When Constraints Are Violated With DML Statements
- Create A Table With A Sub Query
- Describe The ALTER TABLE Functionality
- Remove A Table With The DROP Statement And Rename A Table

Creating Other Schema Objects

- Categorize Simple And Complex Views And Compare Them
- Create A View
- Retrieve Data From A View
- Explain A Read-Only View
- List The Rules For Performing DML On Complex Views
- Create A Sequence
- List The Basic Rules For When To Create And Not Create An Index
- Create A Synonym

Controlling User Acces

- Creating Users
- Creating Roles
- Grant and Revoke System privileges and Object privileges

Oracle SQL Advanced – 8 hrs

Outline Course Contents

Retrieve Data Using Subqueries

- The Exists Operator
- The WITH Clause
- Insert and Update Using a Query
- Correlated Update and Delete

Hierarchical Queries

- Hierarchical data
- The START WITH and CONNECT BY clauses
- The LEVEL pseudo-column
- Sequencing the output
- Eliminating nodes and branches

Enhanced Grouping Features

- Review of basic grouping concepts
- The ROLLUP and CUBE extensions
- The GROUPING SETS extension
- Using the GROUPING and GROUPING_ID functions

Manage Large Data Sets

- Multi-table Inserts
- Conditional and Unconditional Inserts
- Merging Data into a Table
- Table and View Based Merge
- A Sub Query Based Merge

Flashback Technology

- Flashback Query
- The DBMS_FLASHBACK Package
- The AS Clause
- Flashback Table
- Flashback Drop
- Flashback Data Archive

Regular Expression Support

- Regular Expression Notation
- Character matching
- Repetition operators
- Sub expression grouping
- Regular expression functions

Manage Schema Objects

- Column Operations
- Constraint Operations
- Creating and Dropping Indexes
- B-Tree Indexes
- Function Based Indexes
- Descending Indexes
- Creating and Using External Tables

Oracle Database 10g DBA - Basics

Outline Course Contents

Introduction to Oracle Database 10g

- Relational database concepts
- Database administration tasks
- DBA responsibilities

Oracle Database 10g Architecture

- Oracle architecture
- The Oracle instance
- Memory structures
- Background processes
- Server and client processes
- The Oracle database

Installation & Configuration of an Oracle Database

- Installation Prerequisites
- Understand system requirements
- Use optimal flexible architecture
- Authentication methods for a database
- Oracle environment variables
- Install Oracle software using the Oracle Universal Installer (OUI)
- Use the Database Configuration Assistant (DBCA) to create a database
- Use DBCA to manage templates
- Upgrade a database using Database Upgrade Assistant (DBUA)

Administer a Database

- Administrative tools available to a DBA
- Using SQL*Plus in Oracle to manage a database
- Administer the database using Enterprise Manager (EM)
- Start and stop the agent
- Start and stop the EM Database Console
- Access EM
- EM navigation
- Grant EM administrative privileges to a user

Configure the Oracle Network Environment

- Overview of network configuration
- Oracle Net Listener configuration and management
- Oracle Net Naming methods
- Tools for configuring and managing the Oracle network
- Configure client connections with Net Manager
- View listener configuration
- Start and stop the Oracle listener
- Use TNSPING to test Oracle Net connectivity
- Connect to the database

Manage an Oracle Instance

- Access an Oracle database
- Database authentication methods
- Initialization parameters
- Password file
- SHUTDOWN the database
- STARTUP the database
- View alert log and trace files

Tablespace and Datafile Management

- Overview of tablespaces and datafiles
- Use EM to view the storage structure of the database
- Create tablespace commands
- Locally managed tablespaces
- Dictionary managed tablespaces
- Bigfile tablespaces
- Temporary tablespaces
- Multiple temporary tablespaces
- Create tablespaces
- Manage tablespaces
- Use standard and non-standard block sizes
- Create and manage tablespaces using OMF
- Manage tablespaces

Manage Redo Logs

- Redo log file structure
- Maintaining redo log files

- Log switches and checkpoints
- Multiplex redo log files
- Manage online redo log files with OMF
- List redo log information

Manage Control Files

- The usage of the control file
- The contents of a control file
- Manage control files
- Standby control file
- Manage control files with OMF
- List control file information

Manage Schema Objects

- Create a new table
- View the attributes and contents of a table
- Understand data integrity
- Define constraints
- recreate indexes
- View index attributes
- Create views
- Create and use sequences

Manage Users

- Database administration accounts
- User accounts
- Create a user account
- Change a user's password
- Alter and drop a user account
- Monitor user information
- Terminate user sessions

Mange Profiles and Resources

- Create profile command
- Manage passwords with profiles
- Control resource usage with profiles
- Alter and drop profile command

Managing Privileges

- Database access
- System level roles and privileges
- Object level privileges
- The grant and revoke commands
- Create roles
- Modify and drop roles
- Control the availability of roles
- Use predefined roles
- Synonyms
- Listing valid grants
- Product user profiles

Database Auditing

- Auditing SYS statements
- Auditing end user sessions
- Auditing the use of privileges
- Auditing modifications made to database objects
- Audit table relocation
- Fine grained auditing

Undo Management

- Undo data overview
- Monitor and administer undo
- Configure undo retention
- Guarantee undo retention
- Use the undo advisor
- Size the undo tablespace

Manage Data

- Use Data Pump to export data
- Use Data Pump to import data
- Use SQL Loader
- Create directory objects

Oracle Shared Server

- When shared servers should be used

- Configure shared servers
- Monitor shared servers
- Shared server architecture

Monitoring and Resolving Lock Conflicts

- Detect and resolve lock conflicts
- Manage deadlocks

Proactive Database Maintenance

- Automatic Workload Repository
- Automatic Database Diagnostic Monitoring
- Monitor an Oracle database
- Use the Advisors
- Set up notification rules

Performance Monitoring

- Troubleshoot invalid and unusable objects
- Gather optimizer statistics
- View performance metrics
- React to performance issues

Backup and Recovery Considerations

- Oracle Suggested Backup Strategy
- Database backup, restore and recover
- Types of failure
- Tune instance recovery
- Checkpoints, redo log files and archive log files
- Configure ARCHIVELOG mode
- Configure a database for recoverability

Database Backups

- Types of RMAN backup
- Backup sets and image copies
- Create consistent database backups
- Perform online backups
- Perform incremental backups
- Automate database backups

- Monitor the flash recovery area
- Manage backups

Database Recovery

- Recover from the loss of a system critical data file
- Recover from the loss of a non system critical data file
- Recover from the loss of a control file
- Recover from the loss of a redo log file
- Minimizing downtime
- Rapid crash recovery
- Checkpointing and cache recovery
- Parallel recovery
- Trial recovery
- Recover a database with missing data files
- Rebuilding lost or damaged control files
- Recovering read-only tablespaces

Flashback

- Flashback Query
- Flashback Version Query
- Flashback Transaction Query
- Flashback Table
- Flashback Drop

Globalization

- Overview of globalization
- Language encoding schemes
- NLS character sets
- NLS language and territory definitions
- NLS data dictionary views
- Multi language linguistic sorts
- Date times with timezones
- Display formats
- Date functions
- Case and accent insensitive sorts

Managing Resource with Resource Manager

- Overview of the Database Resource Manager

- Create resource plans and consumer groups
- Create resource plan directives
- Control resource by user groups
- Specify an instance plan
- Fixed CPU Quotas
- Integrate Resource Manager and Profiles
- Automatic session assignment
- Monitor the Resource Manager

Automatic Storage Management

- Overview of ASM
- ASM initialization parameter files
- Administer ASM disk groups
- Execute SQL commands with ASM file names
- ASM instance startup and shutdown
- Migrate a database to ASM

Oracle 10g Database Administration Advanced

Getting Introduced

- Grid Computing
- Oracle Enterprise Manager 10g Product Controls
- Database Architecture Review

Oracle Secure Backup

- Installation and Configuration
- Implement the Oracle suggested strategy
- RMAN and Oracle Secure Backup
- Database and File-system files backup/restore to tape
- Using obtool and web interface to configure Oracle Secure Backup devices (CLI/GUI)
- Configuring EM for Oracle Secure Backup and test backup to tape (EM)

- Using RMAN to backup your database to tape (CLI)
- Using the OB Web tool to backup file system files

Automatic Storage Management

- ASM General Architecture and Functionalities
- Dynamic Performance View Additions
- Managing an ASM Instance
- ASM Disk Groups
- Using asmcmd Command Line
- Migrating Your Database to ASM Storage
- Creating an ASM instance in a separate Oracle Home
- Migrating a tablespace to use ASM storage

VLDB Support

- Creating Bigfile Tablespaces
- Packages and data dictionary changes to support VLDB
- Creating and maintaining temporary tablespace groups (TTG)
- Partitioning and Partitioned Indexes
- Skipping unusable indexes
- Creating and using hash-partitioned global indexes
- DML Error Logging
- Interpreting Bigfile ROWIDs

Managing Resources

- Database Resource Manager Concepts and Configuration
- Creating a New Resource Plan
- Active Session Pool Mechanism
- Maximum Estimated Execution Time
- Creating a Complex Plan
- Administering and Monitoring Resource Manager
- Resource Plan Directives
- Creating Resource Consumer Groups

Database Security

Virtual Private Database: Overview

- Creating a Column-Level Policy
- Writing a Policy Function
- Policy Types
- Column level VPD with column masking
- Transparent Data Encryption
- Setting the listener password
- Implement VPD

Introduction To Oracle10g Datagaurd

Introduction To Oracle Streams

Oracle 10g DBA Performance Tuning

Outline Course Contents

Introduction to Oracle Performance Tuning

- Tuning Overview
- Resolving Performance Problems
- The Oracle Approach to Tuning
- Items to Evaluate
- Where to Look
- Plan a Routine Monitoring Regime
- Build a New Database for Performance
- Tune an Existing Database for Performance
- Set Suitable Goals

Diagnosing Problems

- Diagnostic Sources
- Log a Performance Service Request (SR)
- Tips for Avoiding Problematic Queries

Tools For Evaluating SQL Statements

- Overview of SQL Statement Tuning
- Explain Plan and autotrace
- SQL Trace and the tkprof Program
- Interpreting SQL Trace

The Optimizer

- SQL Optimizer
- The Rule Based Optimizer
- The Cost Based Optimizer
- The Analyze Command
- Manage Statistics with DBMS_STATS

Indexes

- Index Overview
- B*Tree Indexes
- Access Paths with Indexes
- Index Scans
- Conditions That Stop Indexes Being Used
- Parameters Affecting Optimizer Index Choice

Metrics, Alerts and Baselines

- System Generated Alerts
- Threshold Based Alerts
- Event Based Alerts
- Retrieve Threshold Information
- View Alert Data
- Manage Metrics Using EM
- Blackouts
- Baselines and Adaptive Thresholds

Statspack

- Overview Of Statspack
- Statspack Architecture
- Install Statspack
- Adjust the Statspack Collection Level
- Create, View and Delete Snapshots
- Generate a Report
- Analyze the Reports to Generate an Execution Plan for a Given SQL Statement
- Resolve Wait Events
- Remove Statspack from the Database

Automatic Workload Repository

- Automatic Workload Repository
- Create Snapshots and Compare Snapshots
- Use Baselines
- Generate AWR Reports
- Compare AWR Periods Reports
- Generate Active Session History (ASH) Report
- Automatic Database Diagnostic Monitor (ADDM)
- Generate and Analyze ADDM Reports

Reactive Tuning

- Use Enterprise Manager to Identify Common Problems
- Eliminate Operating System Contentions

Tuning the Shared Pool

- Overview of the Shared Pool
- Alter and Tune the Shared Pool Size
- Tune the Data Dictionary Cache and the Library Cache
- Shared Pool Advisory Statistics
- Pin objects in the Shared Pool
- Cursor Sharing
- Using the Large Pool
- Latches and Mutexes

Tune The Buffer Cache

- Memory Structures
- Data Block Buffer Pool
- Multiple Buffer Caches
- Manage Free Buffers
- Establish the Buffer Pool Efficiency
- Cache Tables in the Buffer Pools
- Common Performance Issues and the Buffer Cache

Automatic Memory Management

- Automatic Memory Management
- Automatic Shared Memory Management
- Memory Allocation Advisors
- The Memory Advisor
- The Shared Pool and Buffer Cache Advisors

Tune PGA and Temporary Space

- PGA Overview
- Automatic PGA Mode
- Configure the PGA for a New Instance
- The Program Global Area Advisor
- PGA Management Data Dictionary Views
- Tune the PGA_AGGREGATE_TARGET
- SQL Operations that Use Sorts
- Sorting to Disk
- Multiple Temporary Tablespaces
- Allocate Temporary Disk Space for Sorting
- Temporary Tablespace Shrink
- Data Dictionary Views and Sort Segments

Checkpoint and Redo Tuning

- Checkpoint and Redo Issues
- Instance Recovery Performance Tuning
- Redo Log File Size Advisor
- Size the Redo Log Buffer
- Set Multiple Database Writers

Tune I/O

- Database I/O Management
- Layout the Files Using OS or Hardware Striping
- Manually Distribute Files to Reduce I/O Contention
- When to Separate Files
- Sample Configurations
- Select the Data Block Size
- Synchronous I/O Benefits
- FILESYSTEMIO_OPTIONS Parameter
- Automatic Storage (ASM) Monitoring

Use Oracle Blocks Efficiently

- Determine the Database Block Size
- Tablespace, Table and Index Storage Parameters
- Automatic Segment Space Management
- Detect and Resolve Freelist Contention
- Rebuild Tables and Indexes

- The DBMS_SPACE Package
- Row Migration
- Chained Rows
- Bigfile Versus Smallfile Tablespaces
- Extended ROWID Format
- Convert from Dictionary Managed Tablespaces
- Convert to Automatic Segment Space Management

Materialized Views

- Overview of Materialized Views
- Materialized View Creation
- Materialized View Refresh
- Query Rewrite
- Materialized View Data Dictionary Views

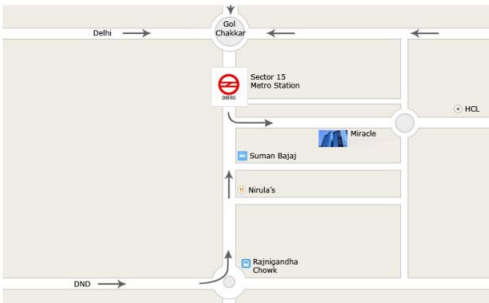
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