



IGNITED MINDS

ITSIT TECHNOLOGY

Mastering ORACLE 12c Performance Tuning

About Ignited Minds

IT Professionals with more than 15 years of Experience worked in highly reputed MNC across Europe, USA and APAC region. Proven track of experience in delivering End to End enterprises level solutions globally. Hands on Experience in cutting edge technologies such as CRM platform, ERP Solutions, Cloud computing, full stack Development, Database Technologies, Data Analytics, Data Mining , Artificial Intelligence, Data Science, Machine Learning , automated testing and micro services based deployments.

We stand out from others by taking care of Personal concealing to understand academic performance, initial screening, Aspirations, accessing individual strong / week areas and customized curriculum fit for each individuals. Specially designed packages so that candidates can complete training in-time bound manner for immediate start of carrier and Upscaling to next level. So Candidates can start training with minimal investment. Personally crafted syllabus comprises of basic to advanced concepts along with hundreds of sample programs with real time examples.

About Course

SQL Skill is in huge demand as it widely used in all databases, reporting and data analysis. As new digital platform are evolving data management and analysis is the key area in new era of IT industry. Having strong SQL knowledge is stepping stone for many of recent evolving technologies like Artificial Intelligence, Machine Learning, DataScience, BigData, FULL Stack development and Data Analytics.

Curriculum for Developers

- What is causing modern day performance issues?
- How to overcome modern day performance issues?
- Performance Gains by SQL Tuning (Behind Indexes)
- Types of Indexes.
- Understanding Structures of B-TREE, BITMAP Indexes
- Function based Indexes (FBI), Foreign Key Indexes (FKI)
- VISIBLE and INVISIBLE Indexes.
- Monitoring and Managing Unused Indexes.
- Optimizer Fundamentals
- Displaying PLAN_TABLE: AUTOTRACE, TRACEONLY, STATISTICS
- Optimizer : Table and Index Access Paths
- Understanding Explain Plan
- Joins, Loops
- Writing Optimized SQL
- Effective indexing, Single Column Indexes , Composite Indexes
- How to Measure Index SELECTIVITY
- Gather Stats , Introduction to Histograms
- Table Partition , Index Partition, LOCAL and GLOBAL Indexes
- Partition Pruning
- Introduction to IOT tables
- Use of Optimizer HITS, PARALLEL, INDEX, ALL_ROWS, FIRST_ROWS
- Issues with Delete, Resetting High Water Mark
- Using Bind Variables
- Issues with Skew data
- Tracing SQL Executions
- Oracle dictionary tables for Indexes Monitoring, DBA_INDEXES, DBA_IND_COLUMNS
- Concept of RESULT_CACHE and Usage

Curriculum for Admin

- Performance Gains by Instance Tuning/Database configuration (Behind Indexes)
- Introduction to Oracle Memory Management and caches
- Understanding SGA/PGA/ Shared Pool, KEEP pool, Recycle pools.
- Fixed allocation memory allocation v/s automatic Memory Management (AMM)
- Tuning the Shared Pool
- Tuning the Buffer Cache
- Impact of REDO LOGS Switch , Archive, NO Archive databases
- Understanding diagnostic reports such as AWR , ADDM and ASH reports
- RAC and non RAC aware Applications. Handling GC Busy waits via Services configuration
- Working in RAC Database. Importance of sequence caching and reverse Key Indexes, Use of HASH Partitioned Indexes.
- About SQL Tuning Sets (STS)
- Concept of cursor sharing attributes, Adaptive Cursor Sharing