## **Introduction to Query Tuning**

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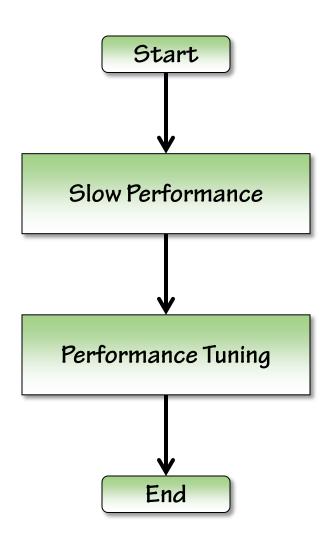


# Performance Tuning is a journey not a destination !!!

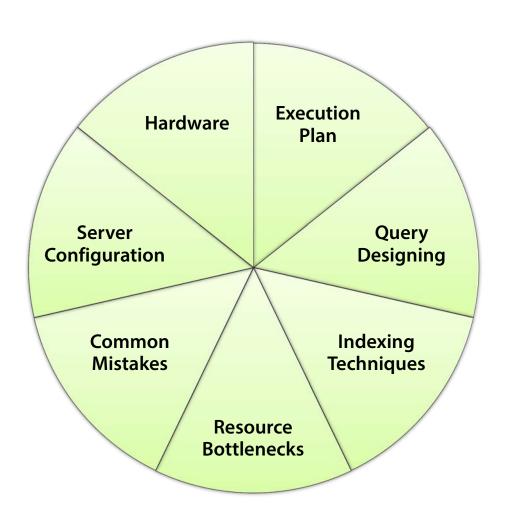
# **Getting Started**

- Understand Execution Plan
- Query Designing and Re-writing
- Essential Indexing Techniques
- Identify Resource bottlenecks
- Avoiding Pitfalls

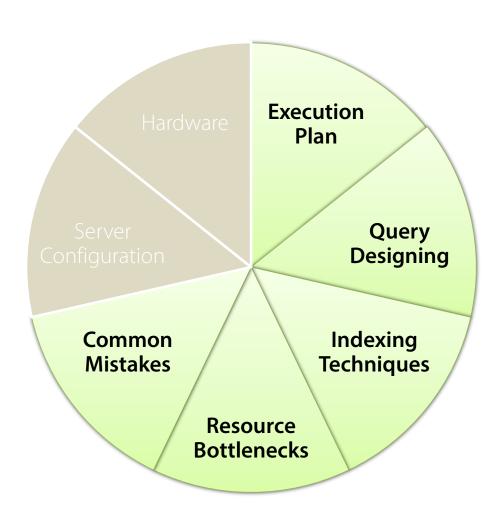
# **Simple Flow Chart**



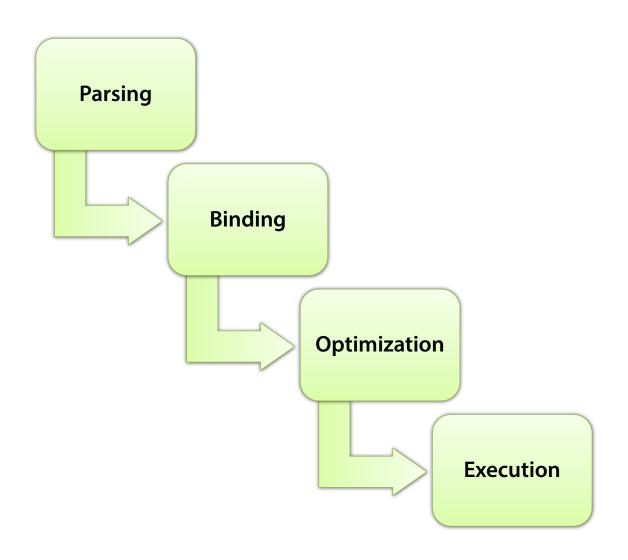
### **Real Pie Chart**



#### **Real Pie Chart**



#### **Query Processing and Optimization**



# **Query Processing and Optimization**

- Cost Based Optimizer
  - □ Disk IO Cost
  - □ CPU Cost
  - Memory Cost Very insignificant
- Indexes
- Query Algorithms
- Query Optimization
- Query Evaluation

#### Demo

- Sample Query
- Execution Plan
- Query Cost