



**NEW HORIZON**  
**COLLEGE OF ENGINEERING**  
New Horizon Knowledge Park, Ring Road, Marathalli  
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC  
Accredited by NAAC with 'A' Grade, Accredited by NBA

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on “Workshop on Advanced Database (NoSQL, MemSQL and Teradata)”

### Workshop

**Name of the Event:** “Workshop on Advanced Database (NoSQL, MemSQL and Teradata)”

**Event Date:** 10/12/2024

**Speaker Details:** Ms. Neha Sexena, Insights Analytics Manager at Commonwealth Bank of Australia.

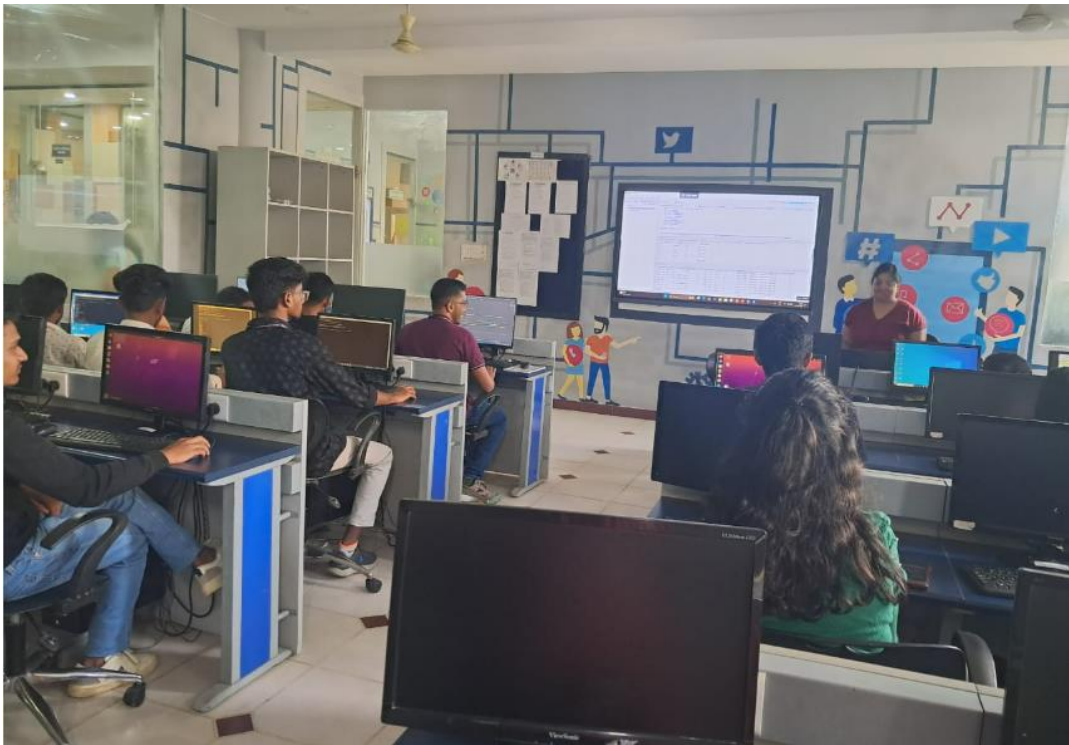
**Venue:** CSE LAB3.

**Audience:** Interested 5<sup>th</sup> Semester Students of all five sections.

### Gist of the Event:

The Department of Computer Science and Engineering organized a one-day workshop on “Advanced Databases (NoSQL, MemSQL, and Teradata)” on 10/12/2024, focusing on enhancing participants' skills in managing large amounts of data. The workshop covered read/write benchmarks on NoSQL (MongoDB vs. Redis) and compared them with MemSQL for transactional workloads, as well as compared Teradata's performance for analytical queries against MemSQL for real-time analytics. It also examined the data modelling approaches in NoSQL, MemSQL, and Teradata (document-based vs. relational vs. hybrid), simulated large data loads on each system (e.g., horizontal scaling on NoSQL vs. vertical scaling on Teradata), and assessed how each database performs under high concurrency and large volumes of data. Through hands-on sessions, participants learned to identify which database technology would be most suitable for different scenarios (e.g., real-time analytics vs. big data warehousing). The workshop also highlighted best practices for further learning and a deeper dive into database administration, performance tuning, and real-time analytics. Participants explored tools such as SQL clients (e.g., DBeaver, MySQL Workbench), command-line tools, and real-time collaboration techniques to streamline their workflow. This hands-on workshop provided participants with practical experience with each of these advanced database systems and helped them understand the unique strengths and limitations of NoSQL, MemSQL, and Teradata.

## Glimpses of the Event





COORDINATOR

CSE-HOD-2

CSE-HOD-1