## PEDAGOGY:

The program content will be presented by experienced faculty members from Great Learning as well as industry professionals. This ensures that the program combines academic rigor with practical industry relevance, providing learners with an exceptional learning experience.

During the sessions, the mentor will serve as the instructor, reinforcing concepts learned through self-paced content, introducing advanced topics, demonstrating concepts through examples, and addressing any doubts or questions to ensure effective learning.

The instructor will actively engage with the learners, encouraging them to share their screens and showcase their code. Additionally, the instructor will ask questions related to the fundamental concepts used in the code to assess and reinforce the learners' understanding.

The goal is to create an interactive and engaging learning environment where learners actively participate, apply their knowledge, and receive guidance from the instructor to enhance their learning outcomes.

## AIM:

Our aim is to foster a dynamic and engaging learning environment through a well-balanced blend of video lectures and online sessions.

We strive to provide a flipped classroom experience, where students have the opportunity to watch the pre-recorded video lectures prior to the live sessions. During the live sessions, the instructor will reinforce the key concepts by working through examples and problem-solving exercises. This approach allows for a deeper understanding of the concepts as the instructor revisits and emphasizes the important points and principles involved.

By actively involving students in problem-solving activities, we aim to enhance their comprehension and retention of the subject matter. Our goal is to create an interactive and collaborative learning experience that facilitates a comprehensive grasp of the material and promotes a strong foundation for further exploration and application.

## Positives:

By revisiting and reinforcing concepts, we aim to ensure a solid understanding of the subject matter. This approach allows learners to strengthen their knowledge and build a strong foundation.

Additionally, our focus on creating a practical class environment enables learners to apply their knowledge in real-world scenarios. Through hands-on exercises and problem-solving activities, learners can gain valuable experience and develop practical skills.

Overall, this combination of concept revision and practical application cultivates a robust learning environment, where learners can enhance their understanding and proficiency in the subject matter.

# DAY WISE BREAKDOWN

| Day 1: Hands-on Database Creation and Table Operations (2 hours)   * Practical demonstration of creating a database and tables in SSMS * Performing CRUD operations on the tables * Hands-on exercises for creating and modifying tables * Q&A session for clarifications |
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| Day 2: Query Writing and Advanced Concepts (2 hours)   * Creating Tables and Understanding Relationships * Writing SQL queries to fetch and manipulate data * Advanced query techniques (subqueries, correlated queries, etc.) * Introduction to stored procedures and their usage * Error handling in SQL Server * Q&A session for additional clarifications |
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| Day 3: Working with Views, Indexing, and ADO.NET (2 hours)   * SQL Queries and Constraints * Creating views and their benefits * Understanding indexing (clustered, non-clustered, unique) * Introduction to ADO.NET and its connected and disconnected architecture * Working with SQL connections, commands, and data readers * Hands-on exercises for practicing ADO.NET operations * Final Q&A session before moving to the next week |
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Please note that the duration of each session can be adjusted based on the pace of learning and the depth of coverage required for each topic.