Joins and set operations – Lesson overview

In the world of relational databases, the ability to **combine and manipulate data from multiple tables is essential**. This lesson delves into the powerful concepts of SQL joins and unions while drawing parallels with set theory.
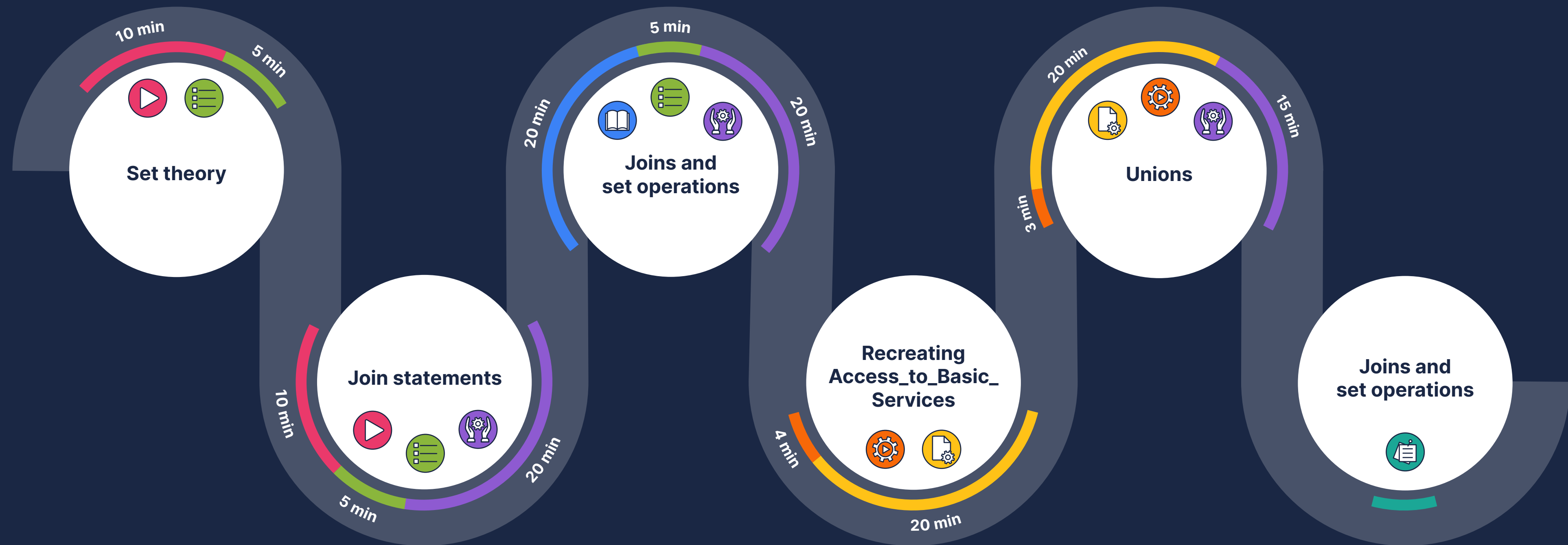
By the end of this lesson, you will have a comprehensive understanding of **how to seamlessly integrate data from different tables and perform complex operations** using these techniques.

- ▶ Video
- 📖 Slide deck
- ⚙ Walk-through
- 📋 Reference card
- 📋 Knowledge questions
- 🤲 Exercise
- 📄 Notebook

Set theory
10 min
5 min

Join statements
10 min
5 min
20 min

Joins and set operations
20 min
5 min
20 min

Recreating Access_to_Basic_Services
4 min
20 min

Unions
20 min
3 min
15 min

Joins and set operations

Learning objectives

- Understand the fundamentals of set theory and its relevance to SQL joins and set operations.

- Learn how to utilise various types of join statements to combine data from multiple tables in SQL.

- Explore the differences between inner, outer, left, and right joins, and know when to apply each type.

- Master the concept of SQL set operations and how they merge datasets while eliminating duplicates.