

Building Questions a Computer can Answer

Data 1050 Week 3: Joins & views in relational data

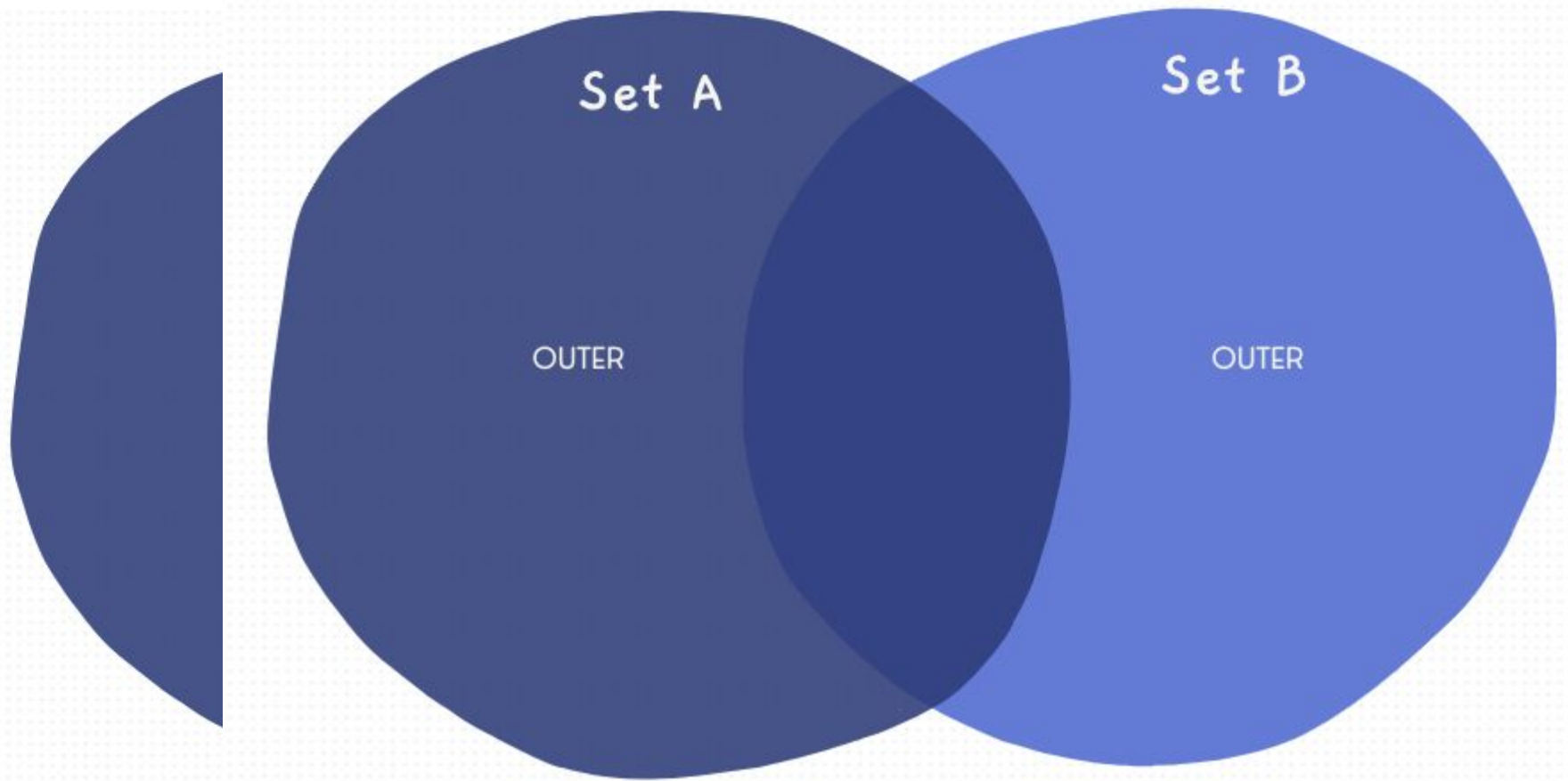
Overview

- Joins: 3 big ideas
- Joins: Code examples &/ PLC
- Views: 1 big idea
- Coming next
- tl;dl

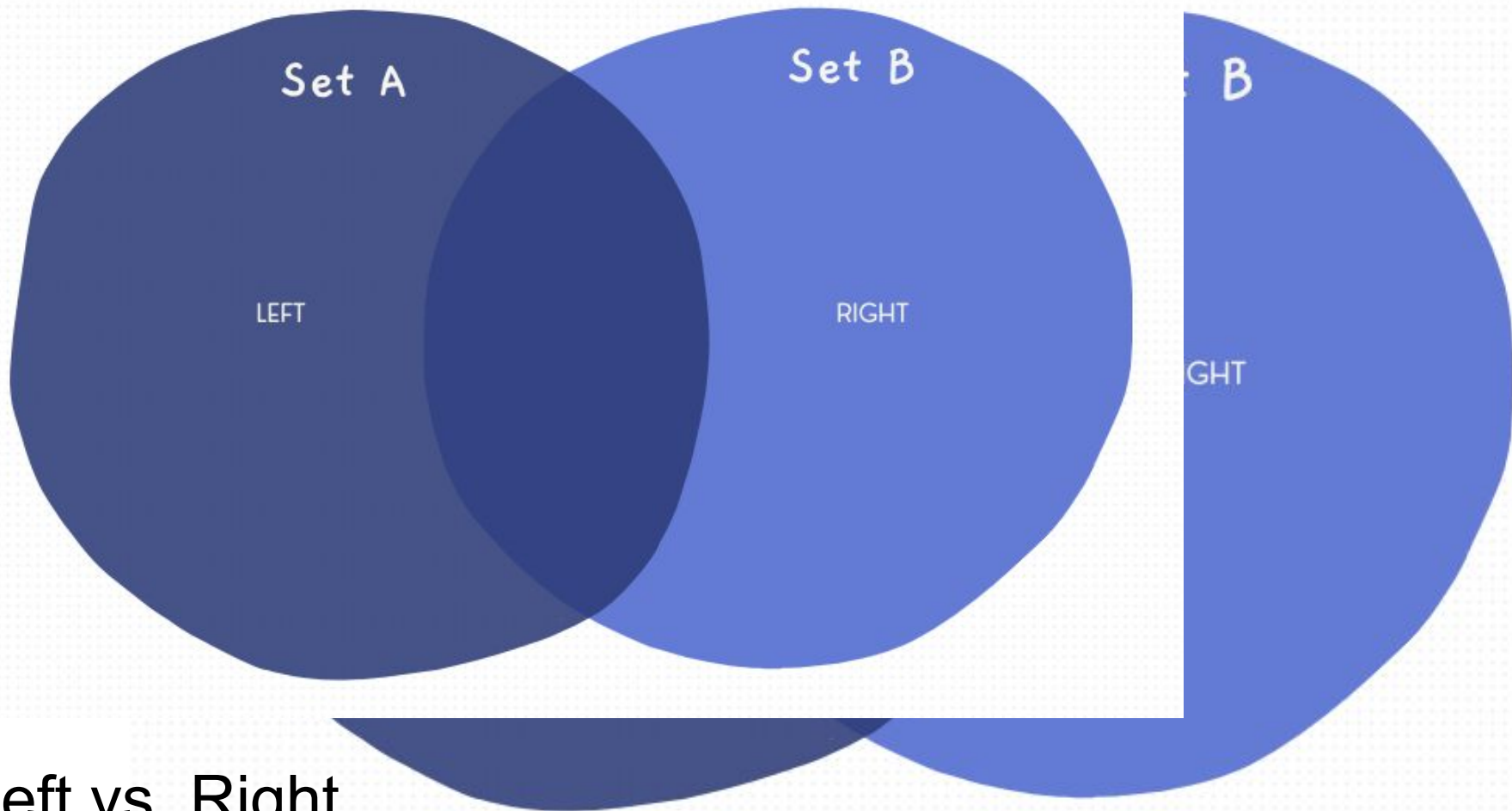
SQL is a *structured* (has rules) *language* (set of words) for building *queries* (asking questions)

Joins are a way to *use relationships* between
tables to *ask better questions*

The *relationship* (inner & outer)
and *location* (left & right) matter



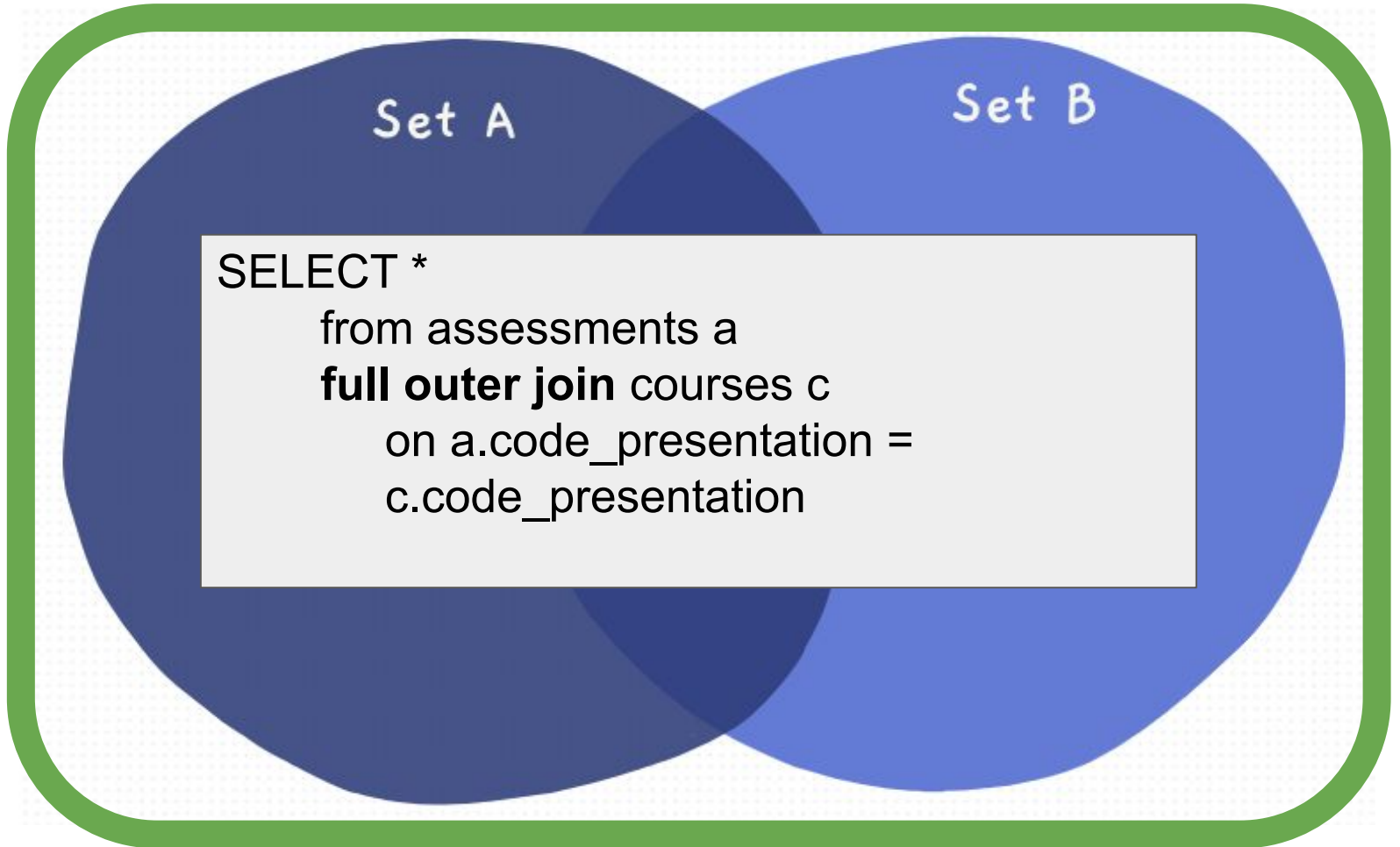
Inner vs. Outer



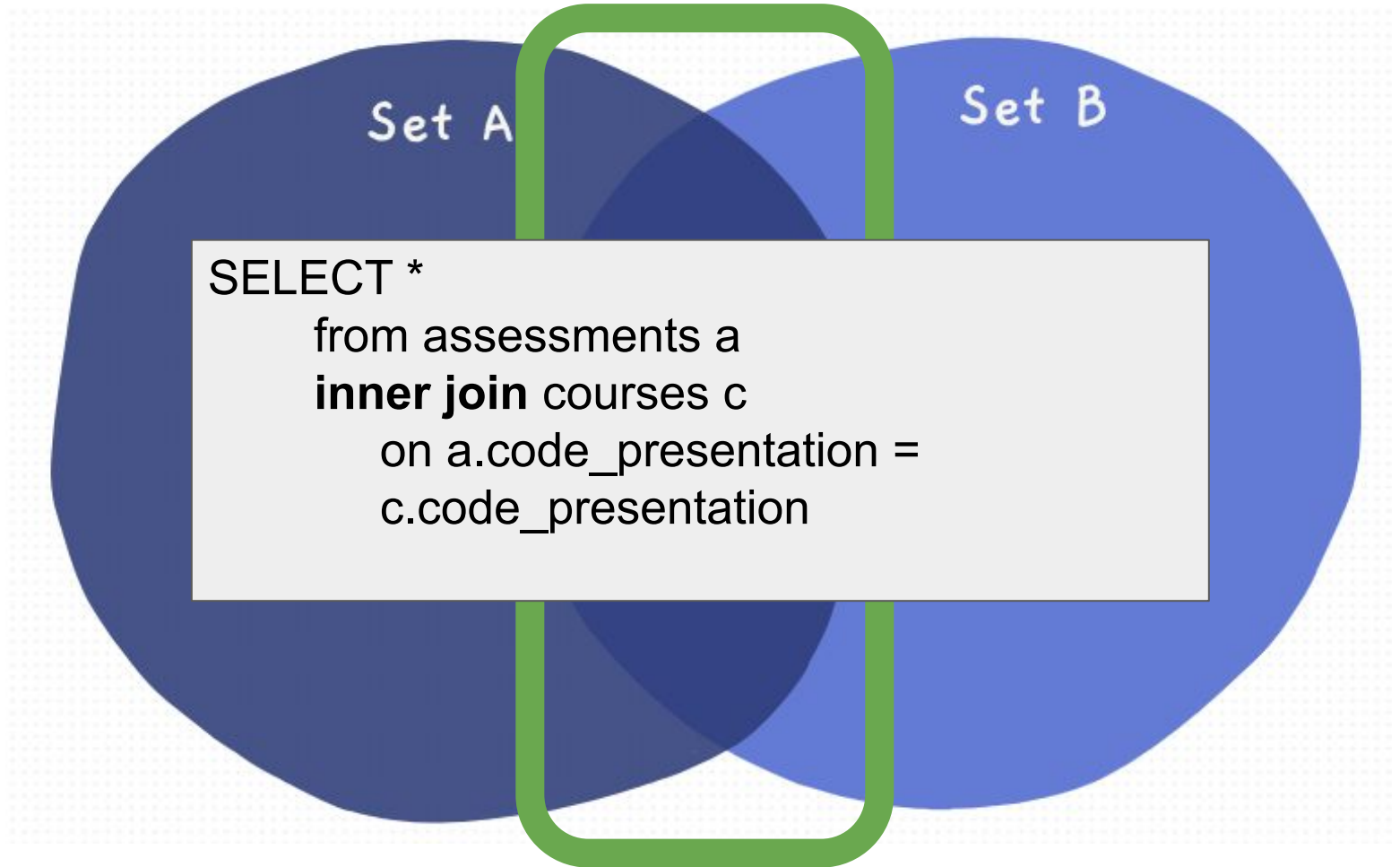
Left vs. Right

Examples

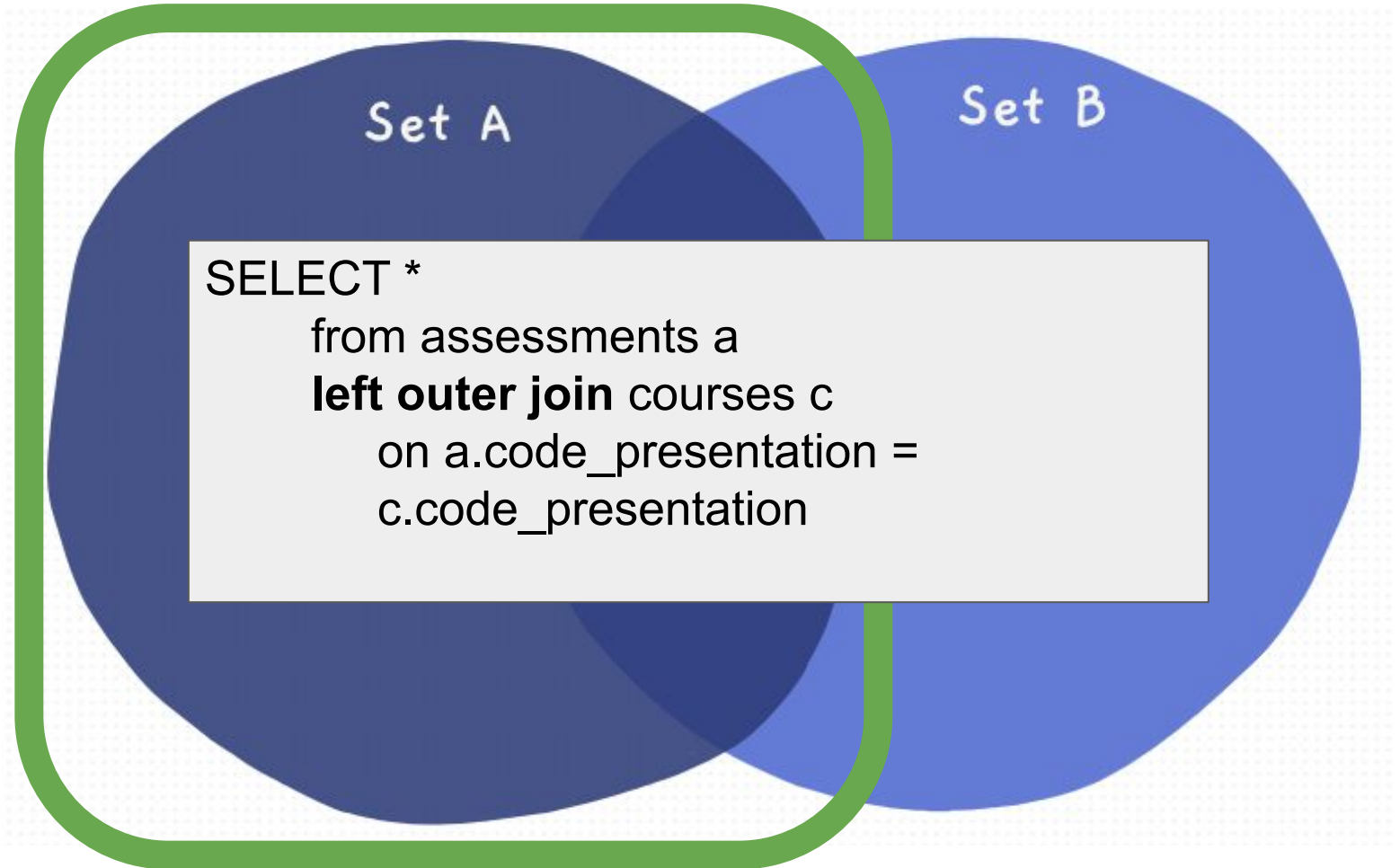
Full



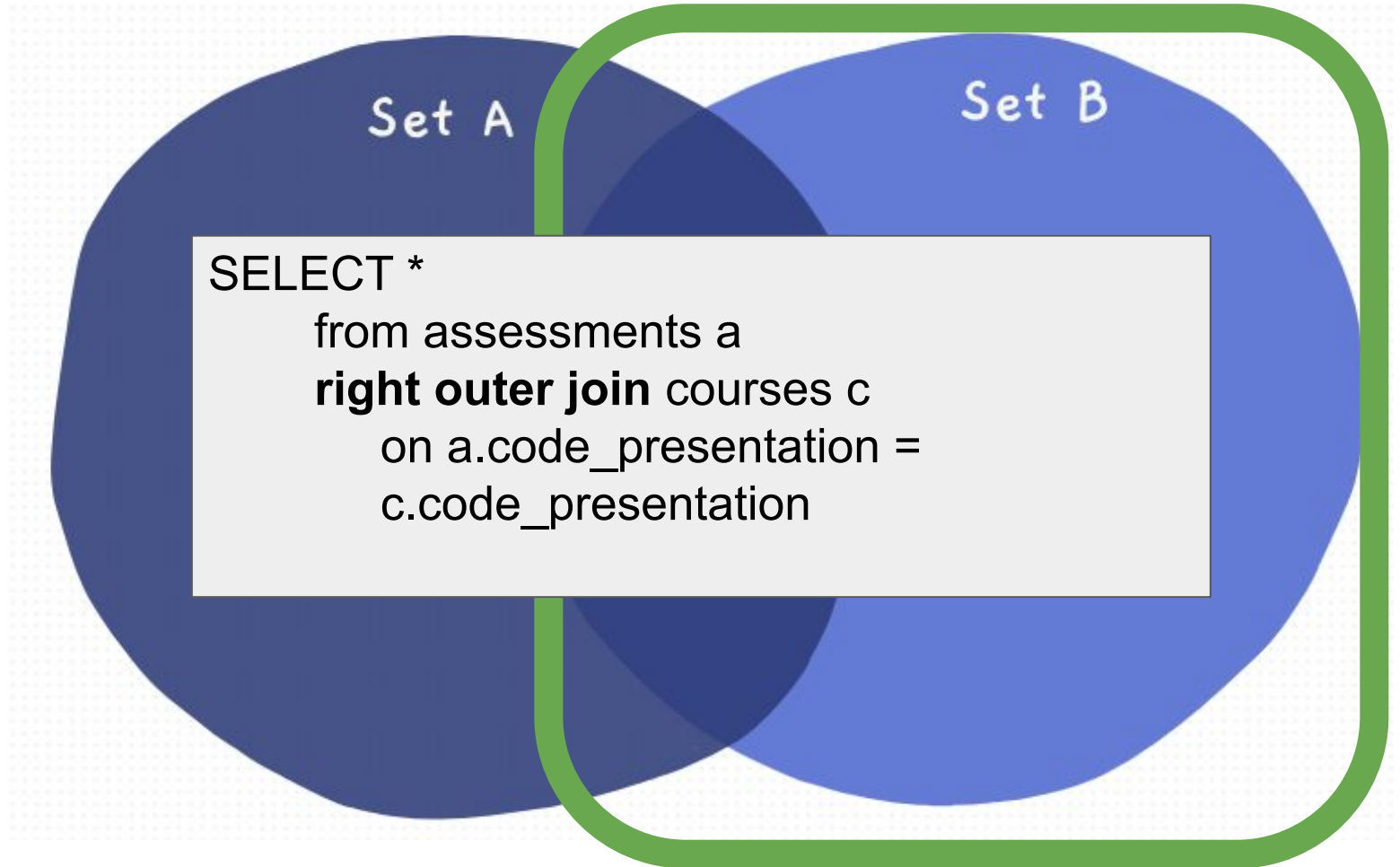
Inner



Left



Right



Tables store *data* ...
Views store *questions*

Table vs. View

	code_module	code_presentation	id_assessment	assessment_type	date	weight	code_module	code_presentation	module_presentation_length
0	AAA	2013J	1752	TMA	19.0	10.0	AAA	2013J	268
1	AAA	2013J	CREATE or REPLACE					2013J	268
2	AAA	2013J	VIEW vw_assessments AS					2013J	261
3	AAA	2013J	SELECT *					2013J	268
4	AAA	2013J	from assessments					2013J	268
5	AAA	2013J	LEFT OUTER JOIN courses					2013J	261
6	AAA	2013J	ON assessments.code_presentation					2013J	268
7	AAA	2013J	= courses.code_presentation					2013J	268
8	AAA	2013J						2013J	261
9	AAA	2013J	1753	TMA	54.0	20.0	EEE	2013J	268

Coming Next

tl;dl