Taking Query to the Next Level
Agenda

- Introduction
- Outer Joins
- Common Expressions
- Aggregate Functions
- Optional Prompts
- Questions
There are 2 methods available when using outer joins

- Delivered (Join Type - Join to get additional fields only (Left outer join)) when adding a record to a query
- Leave the join type as the default “Standard Join” and use the (+) Oracle syntax to outer join records manually – **Only works with Oracle databases**
Outer Joins

- Pros/Cons of the 2 methods
  - Delivered outer join functionality – Outer joins can be created automatically by the query tool. The downside is you can only outer join to the last record that was added to the query.
  - (+) Oracle syntax – (+) Syntax has to be added manually using expressions, so it’s a little more time consuming than the delivered method, but you can outer join to ANY record.

- You must choose one method or the other. You cannot use both methods in the same query at the same time.
Common Expressions

- Concatenate multiple strings together to return one value
  - Example – A.FIELD1 || A.FIELD2 || ETC

- UPPER or LOWER – Capitalize or lowercase a string
  - Example - UPPER(A.CITY)

- LENGTH – Count of the number of characters
  - Example – LENGTH(B.POSTAL)

- SUBSTR – Returns a portion of a string
  - Example - SUBSTR(A.FIELD,1,5)
Common Expressions

- **SYSDATE** – Returns the current date set for the operating system on which the database resides
- **MONTHS_BETWEEN** – Returns months between 2 dates
- **DECODE** – Returns values on simple If-Then-Else statements
- **CASE** – Returns values based on more complex If-Then-Else statements
Aggregate Functions

- Aggregate functions return a single result row based on groups of rows
  - COUNT
  - SUM
  - AVERAGE
  - MIN
  - MAX
Optional Prompts

- Optional prompts allow for further flexibility to be added to a query
  - Example - DECODE(:2, '', A.SUBJECT, :2)
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