Slide 1

Subqueries: Inline View

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1

Slide 2

Inline View Syntax – FROM

- Surround with () as with all subqueries
- You are allowed to use ORDER BY here!
  - Helpful for top-n queries
- Really useful for defining complex structures

2

Slide 3

Inline View Syntax – JOIN

- Surround with () as with all subqueries
- Needs a PK/FK field in the SELECT clause
- Field aliases are REALLY critical to avoid ambiguous column error
- Use a different table alias to avoid confusion as well

3

Reminders

▷ Make sure you include the PK/FK relationship(s) needed for the ON clause
▷ You need a table alias!

4

Inline View Basic Usage

```sql
SELECT
    sub.field_name
FROM
    (
        SELECT
            named_column AS field_name,
            primary_id AS other
        FROM
            rando_table
    ) sub
WHERE
    sub.other > 123
;
```

5

Inline View Top-N Usage

```sql
SELECT
    top_n.section,
    top_n.section_count
FROM
    (
        SELECT
            reg.sectionID AS section,
            COUNT(*) as section_count
        FROM
            registration reg
        GROUP BY
            reg.sectionID
        ORDER BY
            section_count DESC
    ) top_n
WHERE
    ROWNUM < 10
;
```

6

Inline View JOIN Usage

```
SELECT
    reg.sectionID AS randu_sections
FROM
    registration reg
JOIN
    (
        SELECT
            stu.studentID, -- PK/FK Relationship
            stu.firstName,
            stu.lastName
        FROM
            students stu
        WHERE
            stu.phone LIKE '%77%'
    ) certain
ON
    certain.studentID = reg.studentID;
```

7

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