Module 4: Advanced Grouping

POWERING POTENTIAL
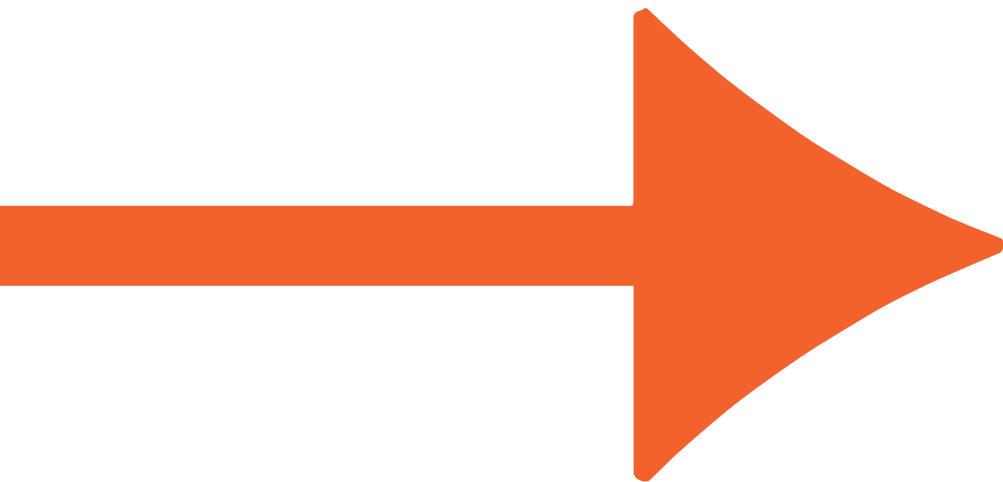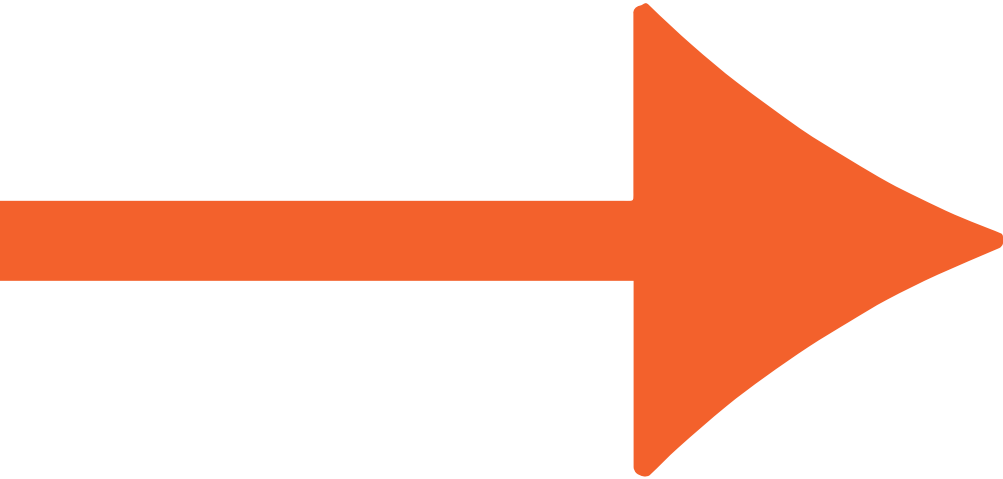
Version 1.6

Objectives

- Adding summary rows
  - ROLLUP
  - CUBE

ROLLUP

- Adds additional grouped rows progressively for each level named in GROUP BY clause.

- Lower levels are summarised and shown as NULL.

QA ROLLUP

```
SELECT Category, Quarter, SUM(Sales) AS TotalSales
    FROM SalesSource
    GROUP BY Category, Quarter
        WITH ROLLUP
```

Category	Subcategory	Quarter	Sales
Accessories	Tyres	Q1	230
Accessories	Tyres	Q2	250
Accessories	Tyres	Q3	275
Accessories	Lights	Q1	1000
Accessories	Lights	Q2	1200
Bikes	Road Bikes	Q1	90
Bikes	Road Bikes	Q2	82
Bikes	Mountain Bikes	Q1	120
Bikes	Mountain Bikes	Q2	124
Bikes	Touring Bikes	Q1	102
Bikes	Touring Bikes	Q2	99

Category	Quarter	Sales
Accessories	Q1	1230
Accessories	Q2	1450
Accessories	Q3	275
Accessories	NULL	2955
Bikes	Q1	312
Bikes	Q2	305
Bikes	NULL	617
NULL	NULL	3572

CUBE

- Adds additional grouped rows for combinations of levels named in GROUP BY clause.

- Grouped levels are shown as NULL.

QA CUBE
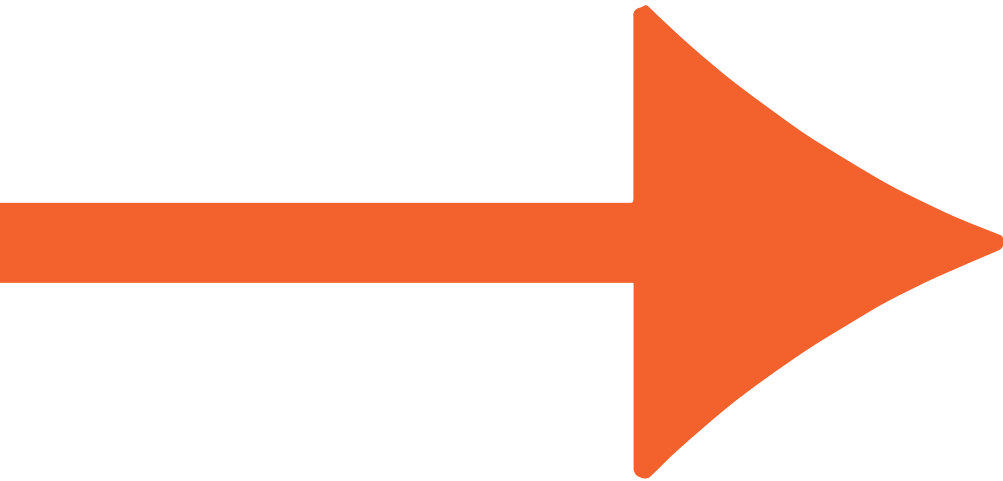
SELECT Category, Quarter, SUM(Sales) AS Sales
    FROM SalesSource
    GROUP BY Category, Quarter
        WITH CUBE

Category	Subcategory	Quarter	Sales
Accessories	Tyres	Q1	230
Accessories	Tyres	Q2	250
Accessories	Tyres	Q3	275
Accessories	Lights	Q1	1000
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Category	Quarter	Sales
Accessories	Q1	1230
Accessories	Q2	1450
Accessories	Q3	275
Accessories	NULL	2955
Bikes	Q1	312
Bikes	Q2	305
Bikes	NULL	617
NULL	NULL	3572
NULL	Q1	1542
NULL	Q2	1755
NULL	Q3	275

- **Adding summary rows**
  - ROLLUP
  - CUBE
  - GROUPING SETS

Review