

*Professional Delivery – Printed Workbooks – Step-by-step Reference Guide – Certificates – After Course Support*

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**Aim:** Further development of SQL querying skills building on SQL Introduction elements and covering some of the more advanced functions and statements.

*Course Objectives*

*Explanation / Example*

- **Review previous level objectives** A quick review to ensure knowledge of general select statements and syntax
- **Selecting unique data** How to extract unique information: For example, In which cities do my client reside
- **Copying data to new tables** Create a query that copies the results into a new table to work with data there.
- **Grouping information** Grouping information by a field For example; clients by county
- **Extracting data from text strings** When you would like to extract data from a field e.g. Just give me the first 5 characters
- **Extracting data from dates and numbers** Working with dates to show the information you want e.g. Extract month from a date or tell me how many years there are between two dates
- **Understanding advanced functions** Looking at how to use more advanced functions to extract and manipulate database information e.g. date parts, change case, convert data, top or bottom values
- **Work with Nulls** Concatenation with nulls, testing for null values and entering your own values for them
- **Introduce CASE Expressions** Test if a value is met and in a new column, specify your own, then test for the next condition, and specify that value. This is like a nested IF function or IF, Then, Else.
- **SQL Aliases** SAssigning another name for a table, field or extracted data. e.g. company renamed client
- **Working with SQL joins** Building efficient code to extract data from multiple tables, Right Join, Left Join, Inner join, Outer Join, Unions
- **Create, Delete and Change Objects** Write SQL code to create databases, tables, Indexes, Views, alter tables and delete databases, tables indexes and views.