SQL Introductory

Prerequisites

Those attending this course require a basic understanding of relational databases and skills equivalent to those presented in NDA's Access Introductory course.
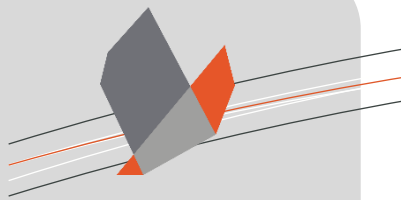
They should also be able to type text efficiently using a text editor.

Course Objectives

On completion of this course, attendees will be able to use SQL to develop complete computer reporting systems without writing a line of programming code. You should come to this course if your work involves the storage and retrieval of lists of information capable of being queried through an SQL interface (Oracle, Ingress, Access etc).

Learning Outcomes

- Understand fundamental database concepts, relational tables, primary and foreign keys

- Describe the history of SQL

- Understand basic SQL structure and syntax

- Select simple record sets from tables

- Utilise SQL conditional operators

- Use statistical and grouping functions

- Create advanced multiple table queries involving both inner and outer joins.

Private Training

This training can only be delivered as a private course for you or your organisation and can be customised for your needs. The training can be delievered either on-site or at NDA.

Please contact us for further information and to be provided with a quote.

SQL Introductory Course Content

Sql and Relational Databases

- History of SQL
- Relational Databases
- Tables
- Table Links
- The Car Pool Database

Sql Query Fields

- The SELECT Statement
- The Distinct Keyword
- Using the Car Pool database
- QAT Shortcuts
- Save the SQL Queries

The Where Clause

- The WHERE Clause
- Testing for Equality
- Dates in a Where clause
- Testing for Inequality
- Logical Operators
- AND and OR
- Sorting the Result Table
- Sorting in Descending Order
- The Between Operator
- The Null Keyword
- The In Operator
- The Like Operator
- The Not Operator

Calculated Fields

- Calculating Values
- Field Name using As
- Concatenating Text

Grouping

- Aggregate Functions
- The Count Function
- The Sum Function
- The Avg Function
- The Max/Min Functions
- Grouping Records
- The Having Clause

Multi Table Queries

- Joining Two Tables
- Table Aliases
- The Cartesian Product
- Joining More Than Two Tables
- Outer Joins

Sub Queries

- Single Row Subqueries