



Getting Started with SQL

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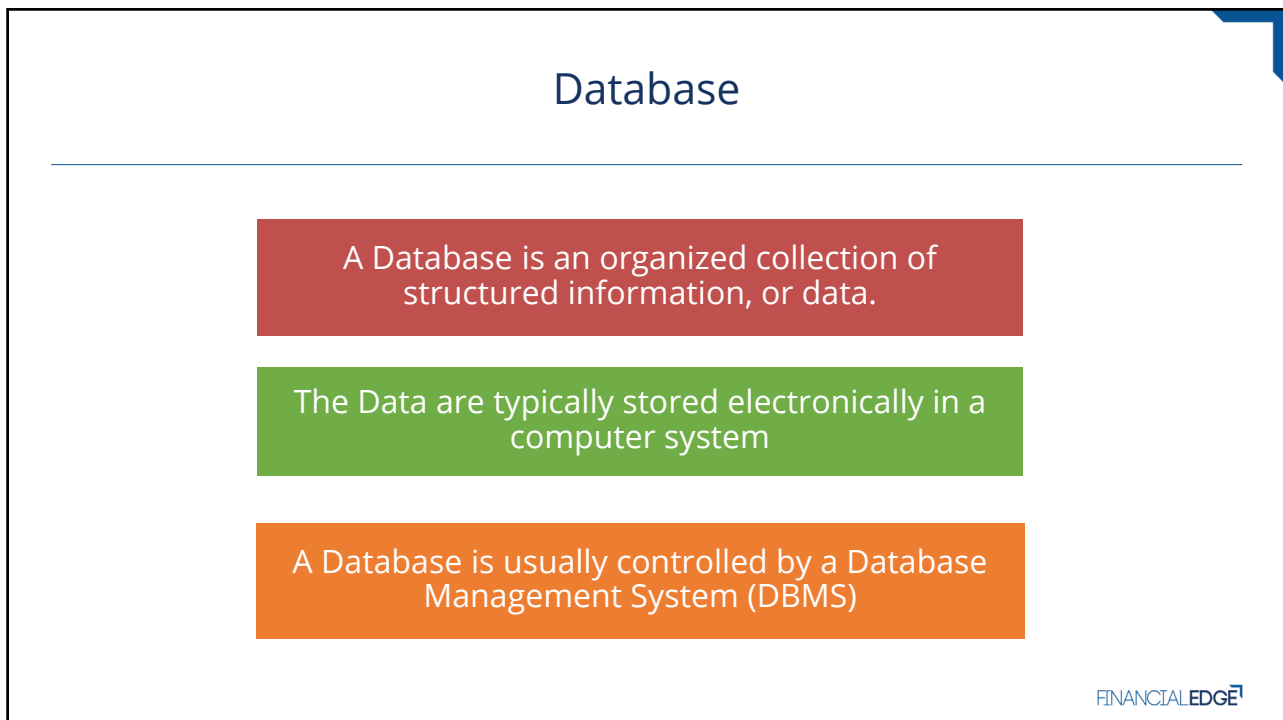
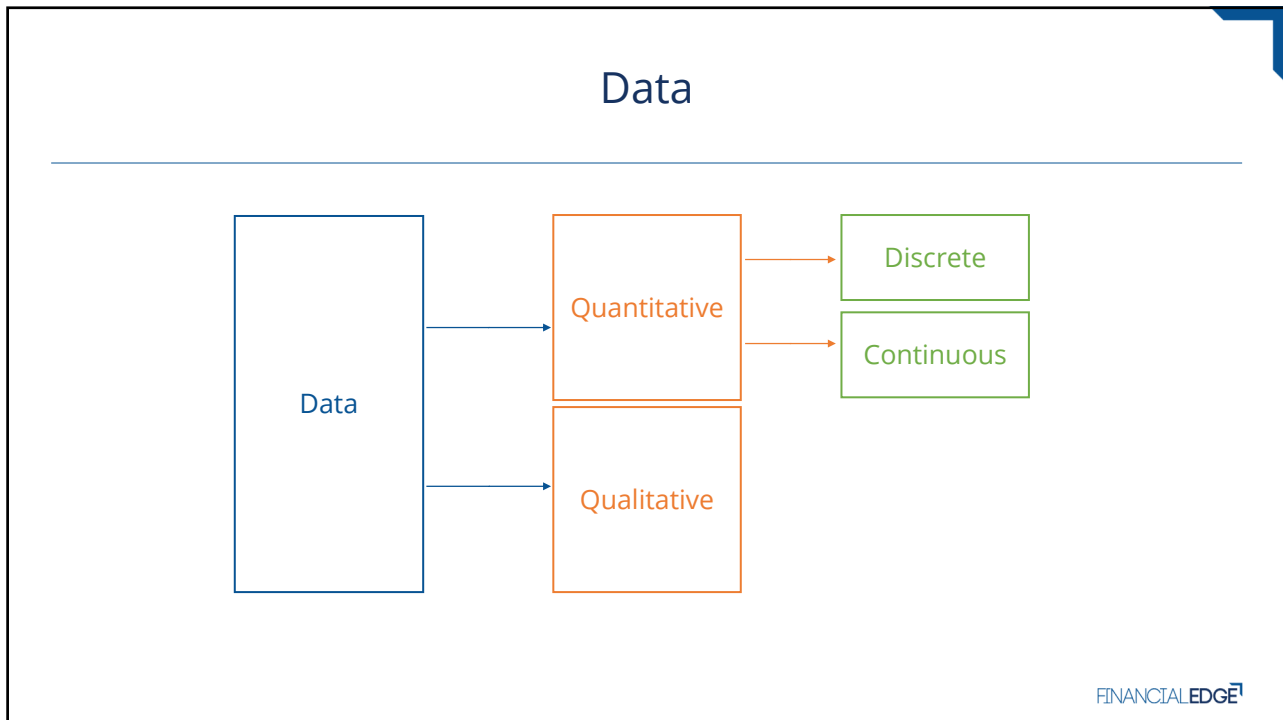
Data

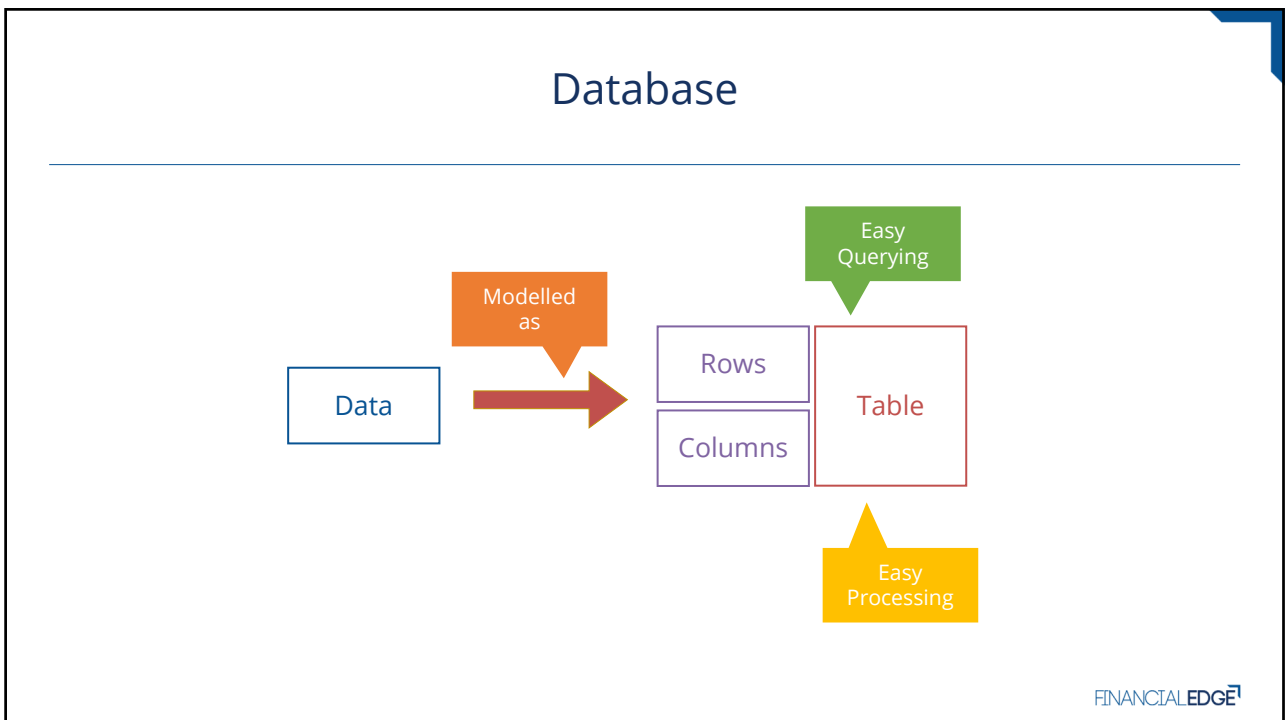
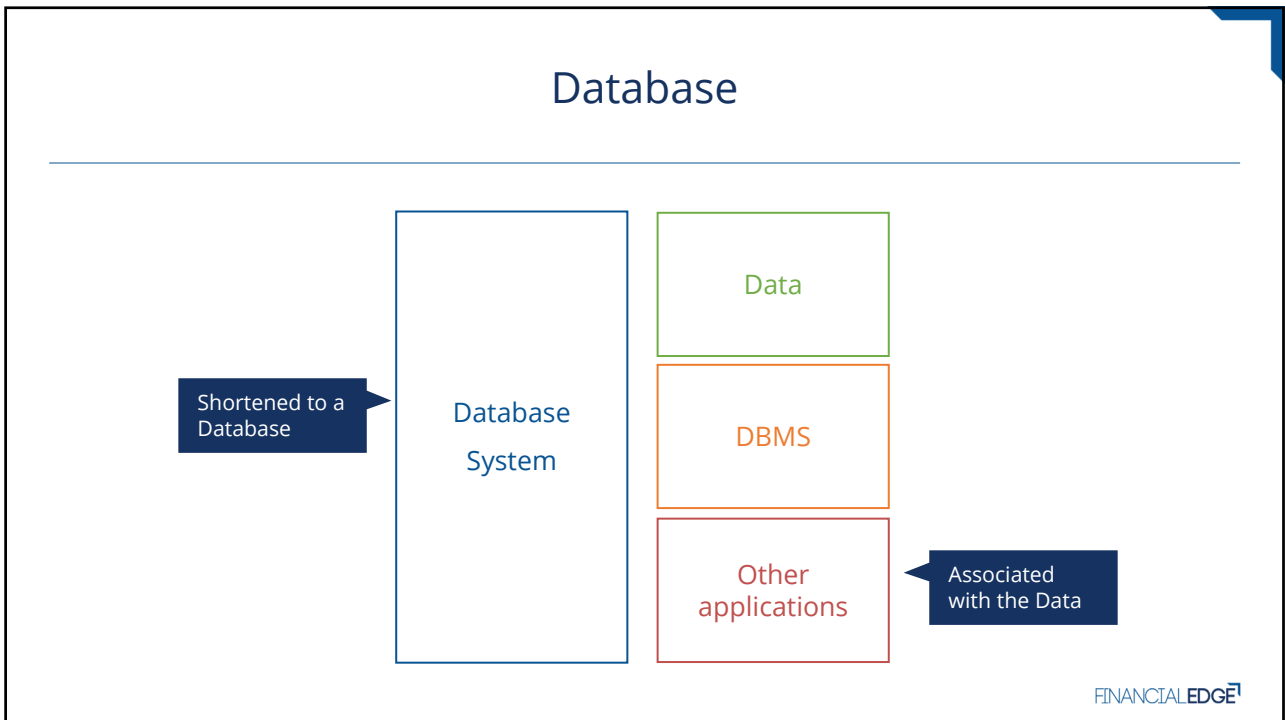
Data is a collection of information, such as numbers, words and observations

Data is divided into Qualitative and Quantitative

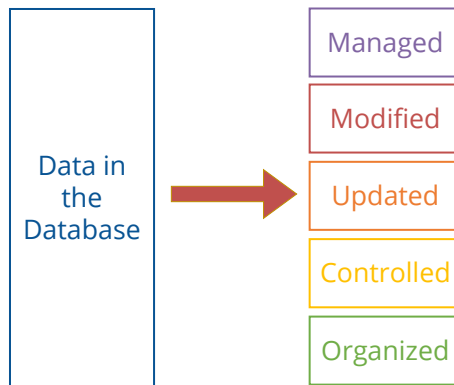
Qualitative data is descriptive and quantitative data is numeric

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Database



Database Table

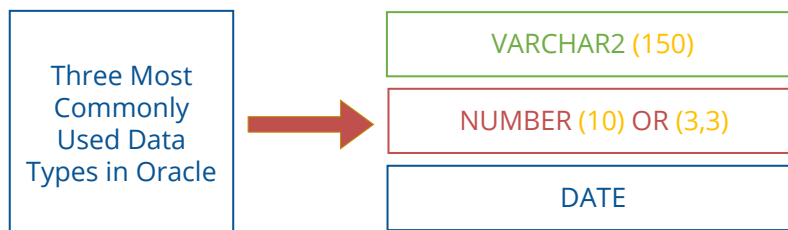
S&P500 data table

Date	Ticker	Share Price
10/21/2019	AMZN	1,785.88
10/18/2019	AMZN	1,793.98
10/17/2019	AMZN	1,798.85
10/16/2019	AMZN	1,786.24
10/15/2019	AMZN	1,776.45
10/14/2019	AMZN	1,741.89
10/11/2019	AMZN	1,745.45
10/10/2019	AMZN	1,738.29
10/09/2019	AMZN	1,729.95

Data Types

Date	Ticker	Share Price
10/21/2019	AMZN	1,785.88
10/18/2019	AMZN	1,793.98
10/17/2019	AMZN	1,798.85
10/16/2019	AMZN	1,786.24
10/15/2019	AMZN	1,776.45
10/14/2019	AMZN	1,741.89
10/11/2019	AMZN	1,745.45
10/10/2019	AMZN	1,738.29
10/09/2019	AMZN	1,729.95

Data Types



Difference between a Database and Spreadsheet

Database and spreadsheets are both ways to store information

Differences between the Database and Spreadsheets



How the data can be stored

Who can access the data

How much data can be stored

Types of Databases

Relational

Object-oriented

Distributed

Data Warehouse

NoSQL

Graph

Database Management System (DBMS)

Software for storing and retrieving data



Considering appropriate security measures



DBMS consists a group of programs to manipulate the database

Types of DBMS

MySQL

Microsoft Access

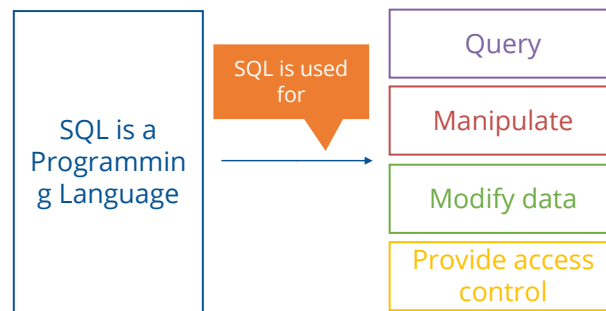
Oracle

SQLite

IBM DB2

Microsoft SQL Server

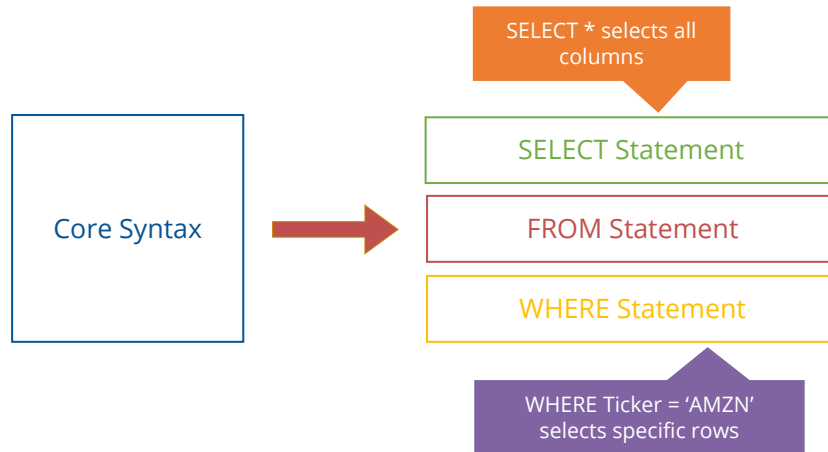
Structured (Server) Query Language (SQL)



Key Terms



SQL Query Syntax and Structure



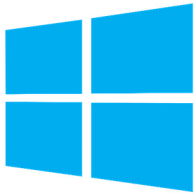
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SQL in the Finance Industry



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Compatible with Major Systems and Platforms



GitHub

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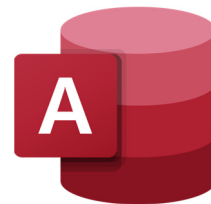
Integrated Development Environments (IDEs)



Oracle SQL
Developer



PL/SQL
Developer



Microsoft
Access

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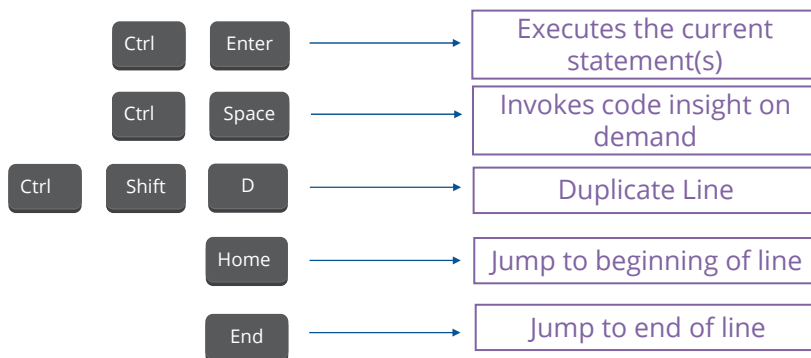
Navigating Around Oracle SQL Developer

The screenshot shows the Oracle SQL Developer interface with several components highlighted by colored boxes and arrows:

- Menu Bar:** Located at the top of the window, containing options like File, Edit, View, Managers, Run, Schema, Tools, Settings, Window, and Help.
- Summary dropdown:** A dropdown menu located below the menu bar, currently showing 'Petal 1118'.
- Code Editor:** The central area where SQL code is written and executed.
- SQL Console:** The area at the bottom where the results of SQL queries are displayed.
- Create Reports:** A button located in the bottom right corner of the interface.

ID	SEPAL_LENGTH	SEPAL_WIDTH	PETAL_LENGTH	PETAL_WIDTH	SPECIES
1	5.1	3.5	1.4	0.2	Iris-setosa
2	4.9	3	1.4	0.2	Iris-setosa
3	4.7	3.2	1.3	0.2	Iris-setosa
4	4.6	3.1	1.5	0.2	Iris-setosa
5	5	3.6	1.4	0.2	Iris-setosa
6	5.4	3.9	1.7	0.4	Iris-setosa
7	4.6	3.4	1.4	0.2	Iris-setosa
8	5	3.6	1.4	0.2	Iris-setosa
9	4.4	2.9	1.4	0.2	Iris-setosa
10	4.9	3.1	1.5	0.2	Iris-setosa
11	5.4	3.7	1.5	0.2	Iris-setosa
12	4.8	3.4	1.4	0.2	Iris-setosa
13	4.7	3	1.4	0.1	Iris-setosa
14	4.3	3	1.1	0.1	Iris-setosa
15	5.0	4	1.2	0.2	Iris-setosa
16	5.7	4.4	1.5	0.4	Iris-setosa
17	5.4	3.9	1.3	0.4	Iris-setosa
18	5.1	3.5	1.4	0.2	Iris-setosa
19	5.1	3.5	1.4	0.2	Iris-setosa

Few Shortcuts in SQL Developer



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