

Manipulating data with SQL

Selecting and Aliasing

LESSON 1 OF 8

Instructor: Christopher Hui

Selecting data in SQL

SQL is similar to an Excel spreadsheet, except we have to explicitly state what we're selecting for any activities we seek to perform.

1

Excel

A	B	C	D	E	F
Name	Platform	Year	Genre	Publisher	Global_Sales
Medal of Honor: Rising Sun	PS2	2003	Shooter	Electronic	\$5.13
Kirby's Dream Land	GB	1992	Platform	Nintendo	\$5.13
Fable III	X360	2010	Role-Play	Microsoft	\$5.13
Call of Duty: Advanced War	XOne	2014	Shooter	Activision	\$5.13
Microsoft Flight Simulator	PC	1996	Simulation	Microsoft	\$5.12

Here, we're **selecting** 6 columns of data, Name, Platform, Year, Genre, Publisher and Global Sales **from an Excel worksheet, where we're selecting 5 Rows.**

2

SQL

With SQL, we can **recreate this** with the below syntax.

SELECT

**Name,
Platform,
Year,
Genre,
Publisher,
Global_Sales**

FROM

Excel_Worksheet

LIMIT 5

Selecting data in SQL

SQL operates off key words starting with the **SELECT** and **FROM** clauses.

SELECT

Name,
Platform,
Year,
Genre,
Publisher,
Global_Sales

FROM

Excel_Worksheet

LIMIT 5

1

2

3

SELECT is the **key word** used to tell SQL, these are the columns we are interested in selecting in our query.

Each column you select needs to come from a table. With SQL, we need to be **explicit** regarding what data source (e.g. table) we are referencing.

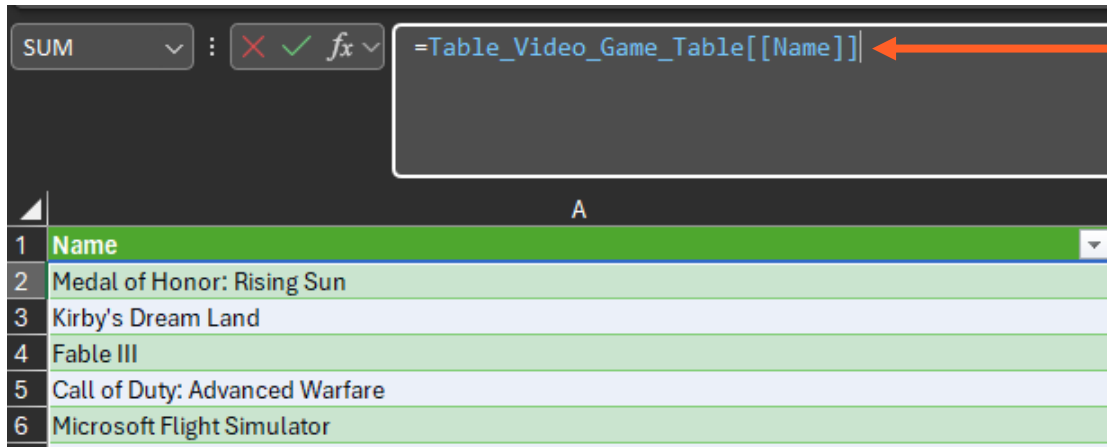
LIMIT is an optional key word that informs SQL how many records you want to return.

Selecting data in SQL

Best practice dictates that we specify with an **alias**, what table we are selecting the columns from.

1

Excel



1	Name
2	Medal of Honor: Rising Sun
3	Kirby's Dream Land
4	Fable III
5	Call of Duty: Advanced Warfare
6	Microsoft Flight Simulator

- In Excel, the table name is provided first, followed then by the column of interest.
- The format will always be: `=Table[[Column_of_interest]]`
- The Table name indicates to Excel where the data is sourced from.
- The Square Brackets indicate which column we are accessing.

Selecting data in SQL

SQL follows a similar naming methodology as Excel, where columns are referenced, indicating the tables they are sourced from.

2

SQL

1 **SELECT**

a

2 Excel_Worksheet.[name],

b

3 Excel_Worksheet.name

4 **FROM** Excel_Worksheet



This is the name of the table
we're referencing.

- In SQL, the **table name is provided first**, followed **then by the column of interest**.
- SQL column syntax can follow either:
 - a) **Dot bracket form**
 - b) **Dot form**
- Functionality wise, SQL will interpret either column selection method the same way.
- Be consistent with the method you select.

Selecting data in SQL

You can alias any column or table name to a shortened form.

2

SQL

No Alias

```
1 SELECT
2 Excel_Worksheet.[name],
3 Excel_Worksheet.name
4 FROM Excel_Worksheet
```

Alias

```
1 SELECT
2 E.[name] AS Name_Bracket,
3 E.name AS Name_Dot
4 FROM Excel_Worksheet AS E
```

- We don't want to always write **Excel_Worksheet.Column_Name**
- We can shorten this with an **alias**.
- Aliases are useful as they enable you to rename columns into more meaningful names for your analysis.



Manipulating data with SQL

Selecting and Aliasing Practice

LESSON 1 OF 8

Instructor: Christopher Hui