

• LIVE

Data Science Bootcamp

Live 03 – Google Sheets





We're going to practice a lot.
Do or Do Not, There is no Try.



Why should we learn spreadsheets?



↑
Spreadsheets



Databases

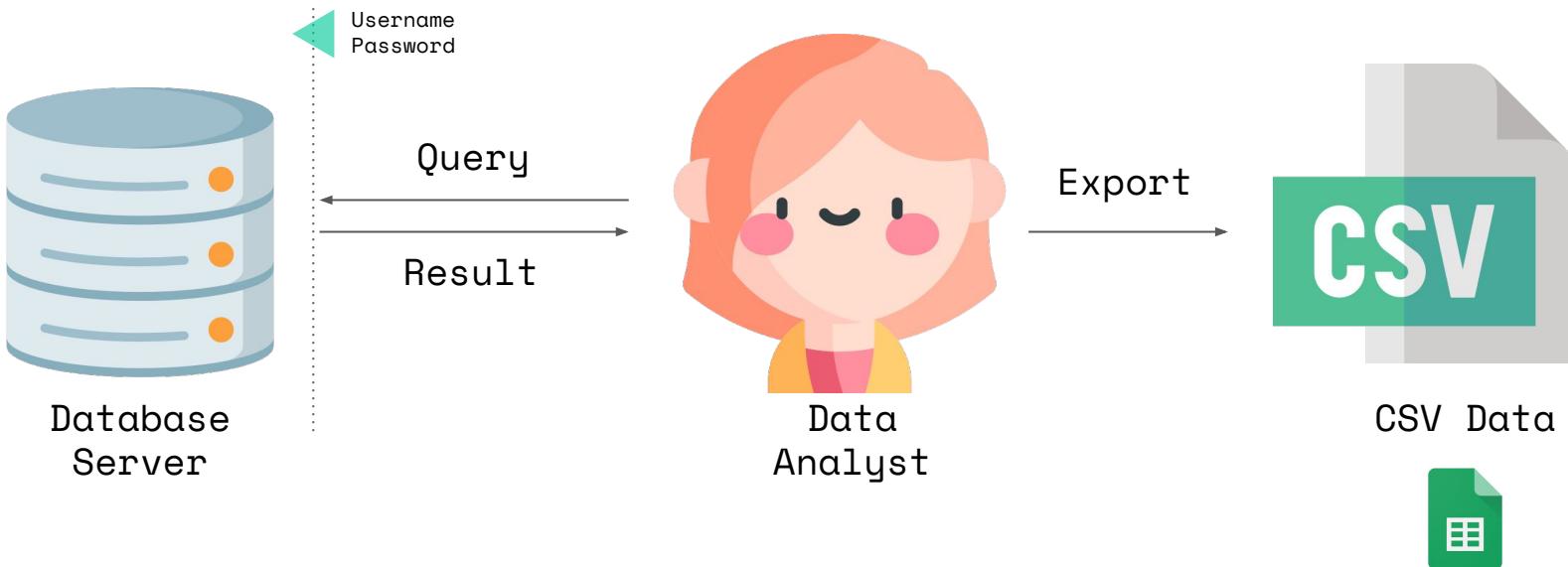


Data Studio

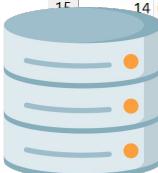
↑
Dashboard



Data Analyst Workflow



Structured data



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer	Customer Segment	Country	City	State	Postal Code	Region	Product ID	Category	Sub-Catag	Product Name	Sales	Quantity	Discount	Profit	
2	1	CA-2016-1	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BO-1	Furniture	Bookcases	Bush Some	261.96	2	0	41.9136
3	2	CA-2016-1	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-1	Furniture	Chairs	Hon Delux	731.94	3	0	219.582
4	3	CA-2016-1	6/12/2016	6/16/2016	Second Class	DV-13045	Darrin Van	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-10	Office Supplies	Labels	Self-Adhesive	14.62	2	0	6.8714
5	4	US-2015-1	10/11/2015	10/18/2015	Standard Class	CSO-20335	Sean O'Do	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-1C	Furniture	Tables	Bretford C	957.5775	5	0.45	-383.031
6	5	US-2015-1	10/11/2015	10/18/2015	Standard Class	CSO-20335	Sean O'Do	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-10	Office Supplies	Storage	Eldon Fold	22.368	2	0.2	2.5164
7	6	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	FUR-FU-1C	Furniture	Furnishing	Eldon Express	48.86	7	0	14.1694
8	7	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	OFF-AR-1C	Office Supplies	Art	Newell 32"	7.28	4	0	1.9656
9	8	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1C	Technology	Phones	Mitel 5320	907.152	6	0.2	90.7152
10	9	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	OFF-BI-10	Office Supplies	Binders	DXL Angle-	18.504	3	0.2	5.7825
11	10	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	OFF-AP-10	Office Supplies	Appliances	Belkin F5C	114.9	5	0	34.47
12	11	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	FUR-TA-1C	Furniture	Tables	Chromcraft	1706.184	9	0.2	85.3092
13	12	CA-2014-1	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hc	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1C	Technology	Phones	Konftel 25	911.424	4	0.2	68.3568
14	13	CA-2017-1	4/15/2017	4/20/2017	Standard Class	AA-10480	Andrew All	Consumer	United States	Concord	North Carolina	28027	South	OFF-PA-10	Office Supplies	Paper	Xerox 196*	15.552	3	0.2	5.4432
15	14	CA-2016-1	12/5/2016	12/10/2016	Standard Class	IM-15070	Irene Mad	Consumer	United States	Seattle	Washington	98103	West	OFF-BI-10	Office Supplies	Binders	Fellowes P	407.976	3	0.2	132.5922
	JS-2015-1	11/22/2015	11/26/2015	Standard Class	HP-14815	Harold Pav	Home Office	United States	Fort Worth	Texas	76106	Central	OFF-AP-10	Office Supplies	Appliances	Holmes Re	68.81	5	0.8	-123.858	
	JS-2015-1	11/22/2015	11/26/2015	Standard Class	HP-14815	Harold Pav	Home Office	United States	Fort Worth	Texas	76106	Central	OFF-BI-10	Office Supplies	Binders	Storex Dur	2.544	3	0.8	-3.816	
	CA-2014-1	11/11/2014	11/18/2014	Standard Class	PK-19075	Pete Kriz	Consumer	United States	Madison	Wisconsin	53711	Central	OFF-ST-10	Office Supplies	Storage	Stur-D-Sto	665.88	6	0	13.3176	
	CA-2014-1	5/13/2014	5/15/2014	Second Class	AG-10270	Alejandro I	Consumer	United States	West Jordan	Utah	84084	West	OFF-ST-10	Office Supplies	Storage	Fellowes S	55.5	2	0	9.99	
	CA-2014-1	8/27/2014	9/1/2014	Second Class	ZD-21925	Zuschuss D	Consumer	United States	San Francisco	California	94109	West	OFF-AR-1C	Office Supplies	Art	Newell 34"	8.56	2	0	2.4824	



What can spreadsheets do?



Store



Analyze



Present

Storage ควรจะแยกจาก **Computing**
(Analyzing data)



Spreadsheets is basic requirement for Data Analyst



We assume you are familiar
with Excel/ Sheets already



Google Sheets is free to use



Google
Sheets

fx | = $10+5*A4$

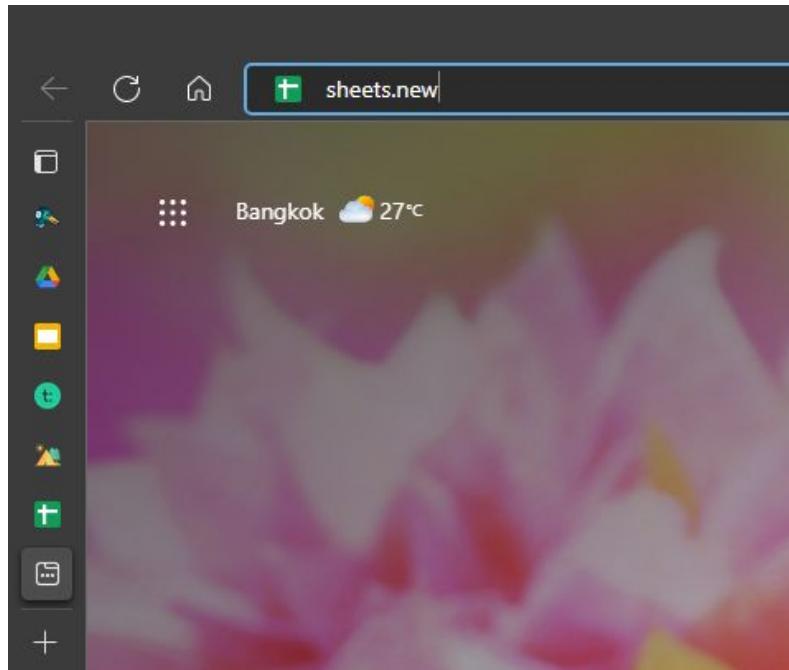
	A	B
1	Intercept and Slope	
2		
3	x	y
4	-10	= $10+5*A4$
5	-9	-35
6	-8	-30
7	-7	-25
8	-6	-20
9	-5	-15
10	-4	-10
11	-3	-5

Cells :)





Type `sheets.new` in web browser



Open a new google sheets

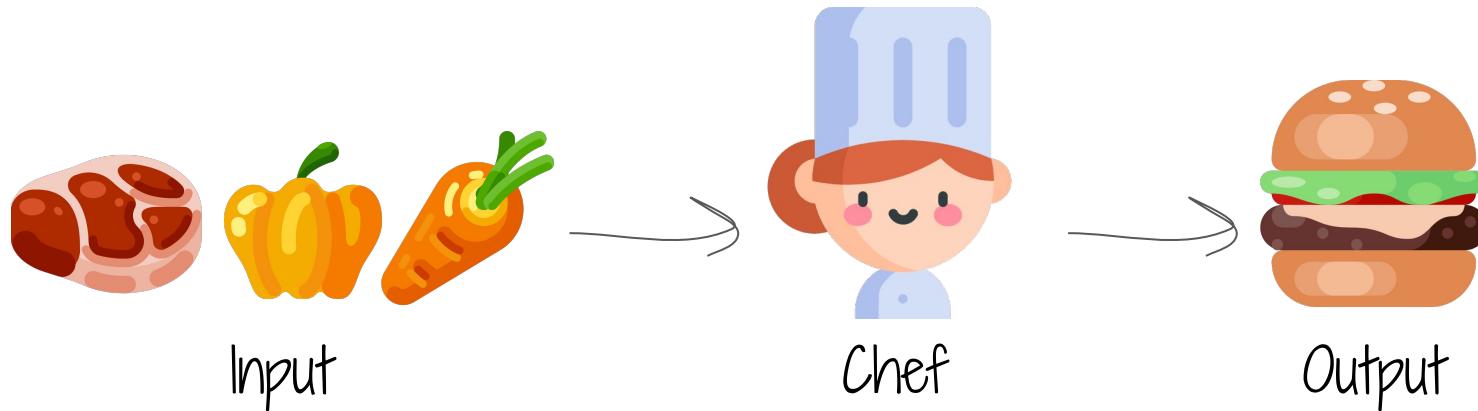


The heart of spreadsheets is function





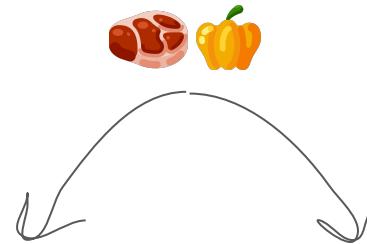
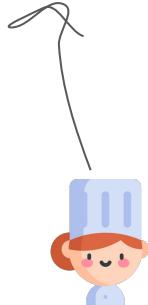
Function is your Chef





A more technical view

```
= function( input1, input2 )
```





Basic Formula & Function

```
=function( input1, input2, [input3] )
```



Basic Formula & Function

Required

```
=function( input1, input2, [input3] )
```

Function name

Optional

The diagram illustrates the syntax of a function call. It shows the keyword '=function' followed by a set of parentheses containing three parameters: 'input1', 'input2', and '[input3]'. A curly brace above 'input1' and 'input2' is labeled 'Required', indicating they are mandatory arguments. A curly brace below '[input3]' is labeled 'Optional', indicating it is a non-mandatory argument. Arrows point from the labels 'Function name' and 'Optional' to their respective parts of the function call.



The most useful function

```
=IF( score >= 80, "Passed", "Failed")
```

Condition

TRUE

FALSE



Data Types

1. Number : 100, 500.2, 25.35
2. Text/ String : “Hello”
3. Boolean : TRUE, FALSE
4. Date : 2022-08-31



Text/ String

```
= "I love Google Sheets"
```

```
= "Hello" & " World"
```

```
= "I'm loving it"
```

```
= "I'm loving " & B2
```

Always in double quote " "

String concatenation



Named range

E	F	G
salary	new_salary	email
\$57,500	=ArrayFormula(SALARY*1.1)	
\$19,500	\$21,450	
\$69,000	\$75,900	
\$55,000	\$60,500	
\$47,500	\$52,250	
\$100,000	\$110,000	
\$125,000	\$137,500	
\$42,500	\$46,750	
\$69,000	\$75,900	
\$49,500	\$54,450	
\$65,000	\$71,500	
\$18,500	\$20,350	
\$65,000	\$71,500	



Name Range in formula



How to write multiple lines function

```
=IFS(salary >= 75000, "High",
      salary >= 50000, "Medium",
      salary < 50000, "Low")
```

IFS(condition1, value1, [condition2, ...], ^ X
[value2, ...])

EXAMPLE

IFS(A1>90, "A", A1>80, "B")

ABOUT

Evaluates multiple conditions and returns a value that corresponds to the first true condition.

condition1

The first condition to be evaluated. This can be a boolean, a number, an array, or a reference to any of those.

value1

The returned value if condition1 is TRUE.

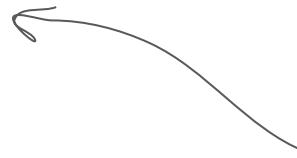
condition2... - [optional] repeatable

Additional conditions to be evaluated if the previous ones are FALSE.

value2... - [optional] repeatable

Additional values to be returned if their corresponding conditions are TRUE.

[Learn more](#)



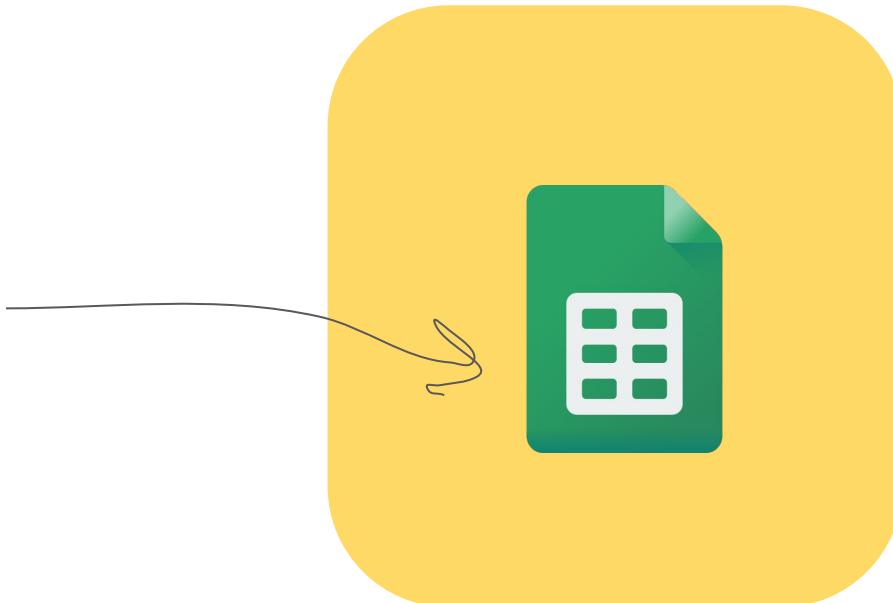
ALT + ENTER



Professional Tip

Name your dataset and reference it in your formula

```
=QUERY(IMDB, "select *")
```





Example Dataset

	A	B	C	D	E	F	G
3	ssn	firstname	lastname	hiredate	salary	gender	performance
4	000-01-0000	Patricia	Milgrom	10/1/2004	\$57,500	F	Average
5	000-02-2222	Sandy	Adams	1/15/2001	\$19,500	F	Average
6	109-87-6543	Emily	Wood	3/12/1997	\$69,000	F	Average
7	109-87-6544	Harold	Foster	8/14/2005	\$55,000	M	Good
8	111-12-1111	James	Johnson	5/3/1996	\$47,500	M	Good
9	123-45-6789	Tracy	Coulter	2/14/1993	\$100,000		Good
10	222-23-2222	Bill	Marlin	3/28/1977	\$125,000	M	
11	222-52-5555	Mary	Smith	1/1/2006	\$42,500	F	Average
12	245-67-8910	Sandy	Johanson	6/2/2005	\$69,000	F	
13	333-34-3333	Emily	Manin	12/1/2000	\$49,500	F	Average
14	333-43-4444	Frank	Smith	1/29/1991	\$65,000	M	Good
15	333-66-1234	Marietta	Brown	3/7/2001	\$18,500	F	Poor
16	335-55-5533	Holly	Jones	4/8/1986	\$65,000	F	Good
17	432-19-8765	Paul	Bronson	11/20/2003	\$58,000	M	Good
18	444-45-4444	Vernon	Frank	4/10/1985	\$75,000	M	Good
19	464-64-4466	David	Webster	1/29/1991	\$58,500	M	Poor
20	500-50-0505	Jose	Rodriguez	7/16/1998	\$150,000	M	Good
21	555-22-3333	Patricia	Rubin	7/25/2003	\$45,000	F	Average
22	555-56-5555	Kenneth	Charles	6/18/1998	\$40,000	M	Poor
23	612-99-1111	Melissa	Roberts	5/14/1984	\$79,000	F	Good
24	625-62-6262	Holly	Holmes	6/15/1992	\$55,000	F	Average
25	767-74-7373	William	Martin	8/26/2006	\$23,000	M	Good
26	776-67-6666	David	Adamson	10/4/2002	\$52,000	M	Poor
27	777-78-7777	Kelly	Marder	9/25/1997	\$38,500	F	Average
28	925-45-7116	David	Whitehead	7/25/1980	\$175,000	M	Good

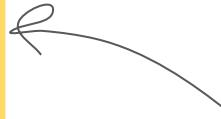
Ask these questions

1. How many columns?
2. How many rows?
3. Is our data complete?



Filter data

	A	B	C	D	E	F	G
3	ssn	firstname	lastname	hiredate	salary	gender	performance
4	000-01-0000	Patricia	Milgrom	10/1/2004	\$57,500	F	Average
5	000-02-2222	Sandy	Adams	1/15/2001	\$19,500	F	Average
6	109-87-6543	Emily	Wood	3/12/1997	\$69,000	F	Average
7	109-87-6544	Harold	Foster	8/14/2005	\$55,000	M	Good
8	111-12-1111	James	Johnson	5/3/1996	\$47,500	M	Good
9	123-45-6789	Tracy	Coulter	2/14/1993	\$100,000		Good
10	222-23-2222	Bill	Marlin	3/28/1977	\$125,000	M	
11	222-52-5555	Mary	Smith	1/1/2006	\$42,500	F	Average
12	245-67-8910	Sandy	Johanson	6/2/2005	\$69,000	F	
13	333-34-3333	Emily	Manin	12/1/2000	\$49,500	F	Average
14	333-43-4444	Frank	Smith	1/29/1991	\$65,000	M	Good
15	333-66-1234	Marietta	Brown	3/7/2001	\$18,500	F	Poor
16	335-55-5533	Holly	Jones	4/8/1986	\$65,000	F	Good
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19	464-64-4466	David	Webster	1/29/1991	\$58,500	M	Poor
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27	777-78-7777	Kelly	Marder	9/25/1997	\$38,500	F	Average
28	925-45-7116	David	Whitehead	7/25/1980	\$175,000	M	Good



Filter only the data you want



Filter data syntax

```
=FILTER( employee, salary<100000 )
```

dataset

condition



Sort data

ssn	firstname	lastname	hiredate	salary	gender	performance
333-66-1234	Marietta	Brown	3/7/2001	\$18,500	F	Poor
000-02-2222	Sandy	Adams	1/15/2001	\$19,500	F	Average
767-74-7373	William	Martin	8/26/2006	\$23,000	M	Good
777-78-7777	Kelly	Marder	9/25/1997	\$38,500	F	Average
555-56-5555	Kenneth	Charles	6/18/1998	\$40,000	M	Poor
222-52-5555	Mary	Smith	1/1/2006	\$42,500	F	Average
555-22-3333	Patricia	Rubin	7/25/2003	\$45,000	F	Average
111-12-1111	James	Johnson	5/3/1996	\$47,500	M	Good
333-34-3333	Emily	Manin	12/1/2000	\$49,500	F	Average
776-67-6666	David	Adamson	10/4/2002	\$52,000	M	Poor
109-87-6544	Harold	Foster	8/14/2005	\$55,000	M	Good
625-62-6262	Holly	Holmes	6/15/1992	\$55,000	F	Average
000-01-0000	Patricia	Milgrom	10/1/2004	\$57,500	F	Average
432-19-8765	Paul	Bronson	11/20/2003	\$58,000	M	Good
464-64-4466	David	Webster	1/29/1991	\$58,500	M	Poor
333-43-4444	Frank	Smith	1/29/1991	\$65,000	M	Good
335-55-5533	Holly	Jones	4/8/1986	\$65,000	F	Good
109-87-6543	Emily	Wood	3/12/1997	\$69,000	F	Average
245-67-8910	Sandy	Johanson	6/2/2005	\$69,000	F	
444-45-4444	Vernon	Frank	4/10/1985	\$75,000	M	Good
612-99-1111	Melissa	Roberts	5/14/1984	\$79,000	F	Good
123-45-6789	Tracy	Coulter	2/14/1993	\$100,000		Good
222-23-2222	Bill	Marlin	3/28/1977	\$125,000	M	
500-50-0505	Jose	Rodriguez	7/16/1998	\$150,000	M	Good
925-45-7116	David	Whitehead	7/25/1980	\$175,000	M	Good

Sort data from low to high
(or high to low)



Sort data syntax

=SORT(employee, column_index, ascending)

dataset

column to sort

low to high



QUERY

```
=QUERY( employee, "select *" )
```

dataset

SQL like syntax

Select and Where clauses



You can search for pattern with Regular Expression

Google Sheets is the best! You can use it for free, 0\$ cost.



Find G__ S__

G[a-z]+ S[a-z]+



Google Sheets is the best! You can use it for free, 0\$ cost.



Find 0-9 number

Google Sheets is the best! You can use it for free, 0\$ cost.



[0-9]



Regular Expression Basics

^A Ant, Amsterdam, America

S\$ Toys, SNSDs, APPLEs

c.t cat, cot, cet, cCt, c8t



Regular Expression Character Class

- [ABC] match A B or C
- [A-Z] match all capital letters
- [A-z] match all letters
- [a-z] match all lowercase letters
- [0-9] match digits



Regular Expression Quantifiers

*	match zero or more
+	match one or more
?	match zero or one
{5}	match exactly 5 characters
{3,5}	match min 3, max 5 characters

[Regular expression - Wikipedia](#)



More Examples :)

[0-9] {5}

apples?

^ [AB] [0-9] {4}

match exactly 5 digits

apple, apples

A1150, B2324, A3599



REGEXMATCH

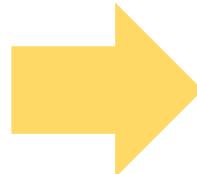
=REGEXMATCH(employee_name, “^ [PM]”)



Extract Text

Text

I love hamburger
I love hotdog
I love pizza
I love onion
I love fried chicken



Extracted

hamburger
hotdog
pizza
onion
fried chicken



REGEXEXTRACT

```
=REGEXEXTRACT( text, "I love (food_you_want)" )
```

text

food you want in ()



Project - ID Card Parser

We will extract
information from this card



ID 3-5522-87666-87-2

Miss. Carry Anna

Date of Birth 18 Jan 1995

Address 967 Tokyo Japan 10880

Expired Date 25 Apr 2025



How to join two tables

ID	Student	Major
1	David	Economics
2	John	Economics
3	Mary	Business
4	Anna	Marketing

Student

ID	City	Country
1	Bangkok	Thailand
2	New York	USA
3	London	UK
4	Tokyo	Japan

Address



Joined Table

ID	Student	Major	City	Country
1	David	Economics	Bangkok	Thailand
2	John	Economics	New York	USA
3	Mary	Business	London	UK
4	Anna	Marketing	Tokyo	Japan

Student

Address



We can join tables with VLOOKUP

ID	Student	Major	ID	City	Country
1	David	Economics	1	Bangkok	Thailand
2	John	Economics	2	New York	USA
3	Mary	Business	3	London	UK
4	Anna	Marketing	4	Tokyo	Japan

Student Address

=VLOOKUP(id, address, columns, match)



id in student table



lookup table



columns you want



exact match



VLOOKUP

Employee Table

ssn	lastname	firstname	positionID	locationID
000-01-0000	Milgrom	Patricia	2	2
000-02-2222	Adams	Sandy	3	1
109-87-6543	Wood	Emily	2	5
109-87-6544	Foster	Harold	1	3
111-12-1111	Johnson	James	1	3
123-45-6789	Coulter	Tracy	2	1

Location Table (Lookup)

locationID	locationcity	address	state	zipcode	officephone
1	Atlanta	450 Peachtree	GA	30316	(404)333-5555
2	Boston	3 Commons Bl	MA	2190	(617)123-4444
3	Chicago	500 Loop High	IL	60620	(312)444-6666
4	Miami	210 Biscayne B	FL	33103	(305)787-9999
5	New York City	1650 Washington	NY	15648	(518)256-3100
6	Denver	312 Mount View	CO	54657	(205)607-5289
7	Salt Lake City	316 S. State St	UT	84125	(801)459-6652
8	Los Angeles	1400 Main St	CA	94235	(705)639-0227



VLOOKUP

Employee Table

ssn	lastname	firstname	positionID	locationID
000-01-0000	Milgrom	Patricia	2	2
000-02-2222	Adams	Sandy	3	1
109-87-6543	Wood	Emily	2	5
109-87-6544	Foster	Harold	1	3
111-12-1111	Johnson	James	1	3
123-45-6789	Coulter	Tracy	2	1

Location Table (Lookup)

locationID	locationcity	address	state	zipcode	officephone
1	Atlanta	450 Peachtree	GA	30316	(404)333-5555
2	Boston	3 Commons Bl	MA	2190	(617)123-4444
3	Chicago	500 Loop High	IL	60620	(312)444-6666
4	Miami	210 Biscayne B	FL	33103	(305)787-9999
5	New York City	1650 Washington	NY	15648	(518)256-3100
6	Denver	312 Mount View	CO	54657	(205)607-5289
7	Salt Lake City	316 S. State St	UT	84125	(801)459-6652
8	Los Angeles	1400 Main St	CA	94235	(705)639-0227



Final Table (Join Both Tables into One)

ssn	lastname	positionID	locationID	locationcity	address	state	zipcode	officephone
000-01-0000	Milgrom	2	2	Boston	3 Commons Blvd	MA	2190	(617)123-4444
000-02-2222	Adams	3	1	Atlanta	450 Peachtree Rd	GA	30316	(404)333-5555
109-87-6543	Wood	2	5	New York City	1650 Washington Blvd	NY	15648	(518)256-3100
109-87-6544	Foster	1	3	Chicago	500 Loop Highway	IL	60620	(312)444-6666
111-12-1111	Johnson	1	3	Chicago	500 Loop Highway	IL	60620	(312)444-6666
123-45-6789	Coulter	2	1	Atlanta	450 Peachtree Rd	GA	30316	(404)333-5555
222-23-2222	Marlin	2	4	Miami	210 Biscayne Blvd	FL	33103	(305)787-9999
222-52-5555	Smith	1	3	Chicago	500 Loop Highway	IL	60620	(312)444-6666
245-67-8910	Johanson	1	6	Denver	312 Mount View Dr	CO	54657	(205)607-5289
333-34-3333	Manin	1	2	Boston	3 Commons Blvd	MA	2190	(617)123-4444

Employee Table

Location Table (Lookup)



Pro Tip!

The more functions you know,
The more you can do



Ideal: Separate Storage from Compute

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Dream, build, and transform with Google Cloud

Build apps faster, make smarter business decisions, and connect people anywhere.

[Go to console](#)

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[What's new](#) [For developers](#)

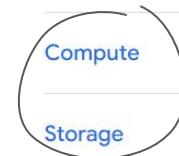
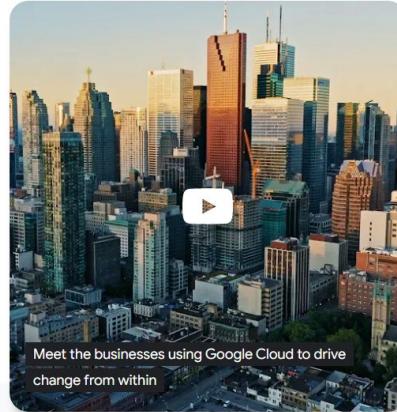
EVENT
Today, meet tomorrow. Join us October 11-13 for Google Cloud Next



2-MINUTE QUIZ
How data-driven is your company culture?



REPORT
Rank your digital transformation against global leaders



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[Data analytics](#)

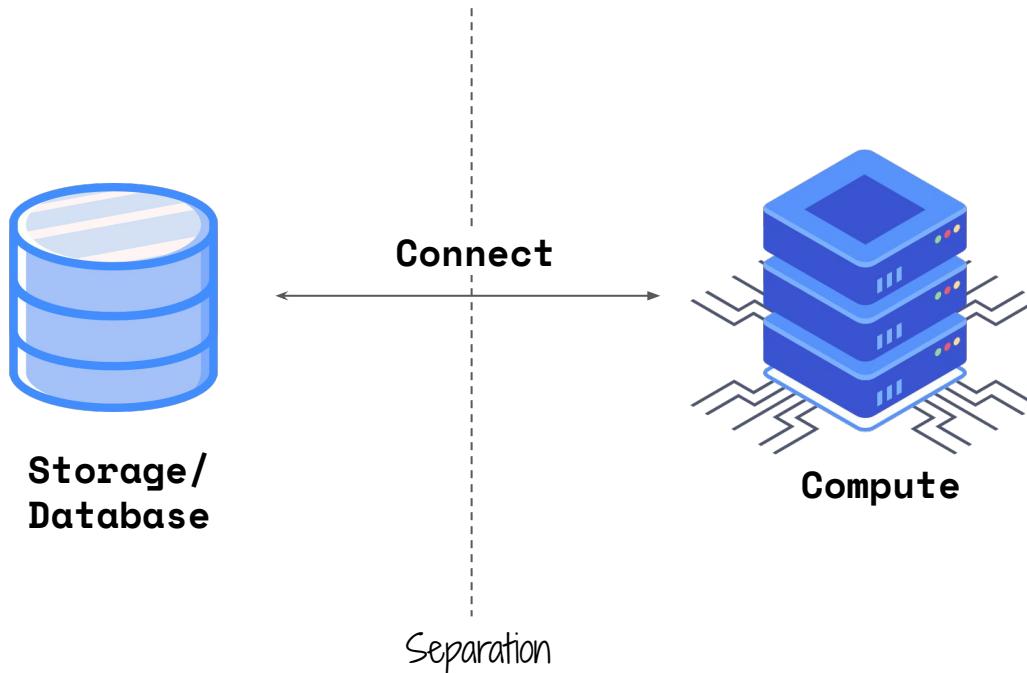
[AI and machine learning](#)

[Networking](#)



Ideal: Separate Storage from Compute

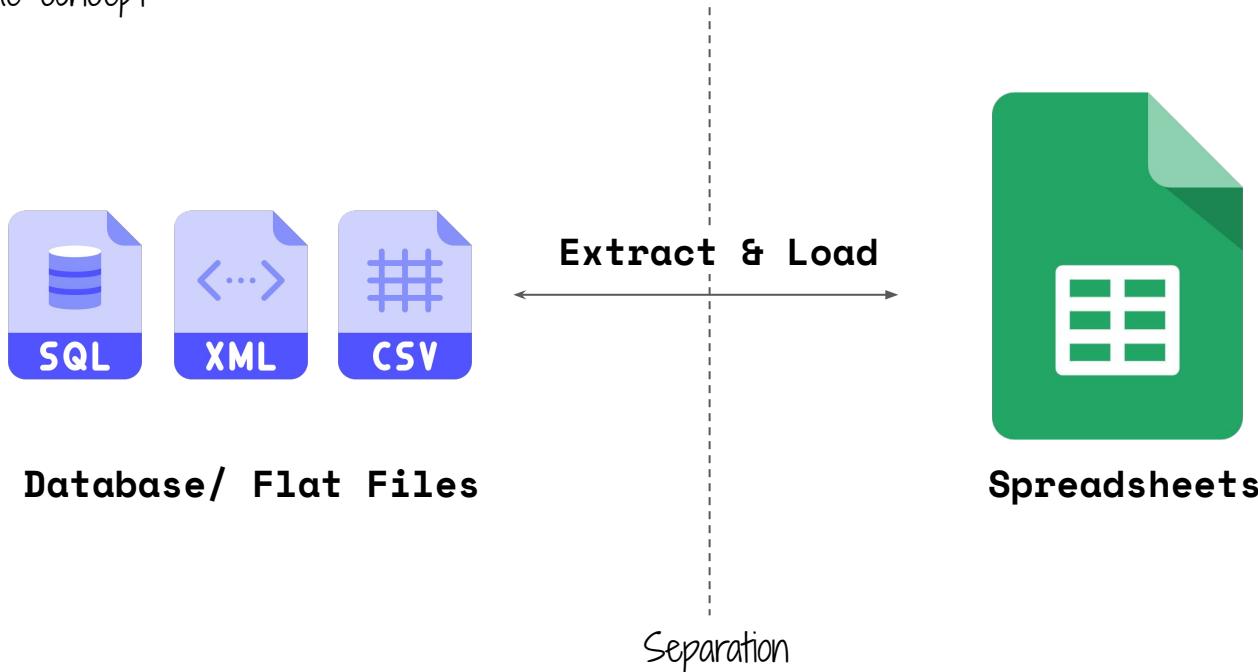
In data analytics, we can use much of the same concept





Ideal: Separate Storage from Compute

In data analytics, we can use much of the same concept





Excel Power Query

The screenshot illustrates the process of extracting data from an XML file and loading it into an Excel table.

Left Side (XML Data):

- A code editor window titled "menu.xml" displays the following XML structure:

```
<menu>
  <food>
    <name>hotdog</name>
    <price>19</price>
    <calorie>250</calorie>
  </food>
  <food>
    <name>boiled rice</name>
    <price>36</price>
    <calorie>180</calorie>
  </food>
  <food>
    <name>fried egg</name>
    <price>12</price>
    <calorie>220</calorie>
  </food>
  <food>
    <name>pizza</name>
    <price>48</price>
    <calorie>490</calorie>
  </food>
  <food>
    <name>french fried</name>
    <price>19</price>
    <calorie>580</calorie>
  </food>
</menu>
```

Right Side (Excel Power Query Editor):

- The "Table Design" tab is selected in the ribbon.
- A table named "food" is displayed with columns: name, price, and calorie.
- The data extracted from the XML is:

	A	B	C
1	name	price	calorie
2	hotdog	19	250
3	boiled rice	36	180
4	fried egg	12	220
5	pizza	48	490
6	french fried	19	580
7			
8			
10			
11			

Bottom Center: A yellow button labeled "Extract & Load".

Bottom Status Bar: Shows "Ln 1, Col 1" and "Ready".



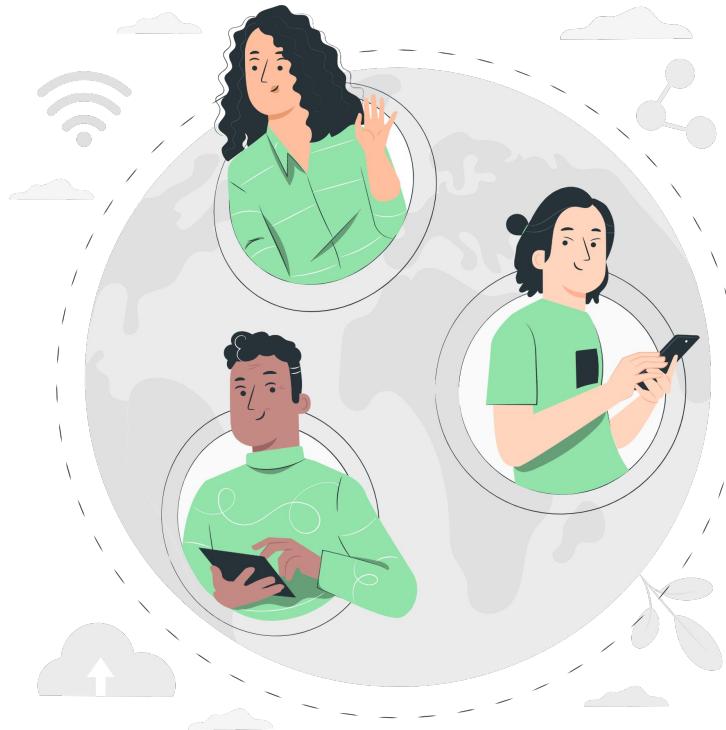
Excel Power Query

The screenshot shows the Microsoft Excel ribbon with the 'Data' tab selected. In the 'Get Data' section of the ribbon, a callout bubble points from the 'From File' option under 'From Excel Workbook' to the text below. The 'From File' option is part of a dropdown menu that includes 'From Database', 'From Azure', 'From Power Platform', 'From Online Services', 'From Other Sources', 'Combine Queries', 'Launch Power Query Editor...', 'Data Source Settings...', and 'Query Options'. The main Excel interface shows a blank worksheet with columns labeled C through K.

Power Query
(Extract, Transform, Load)



Cloud makes it easy to scale our infrastructure



Scale

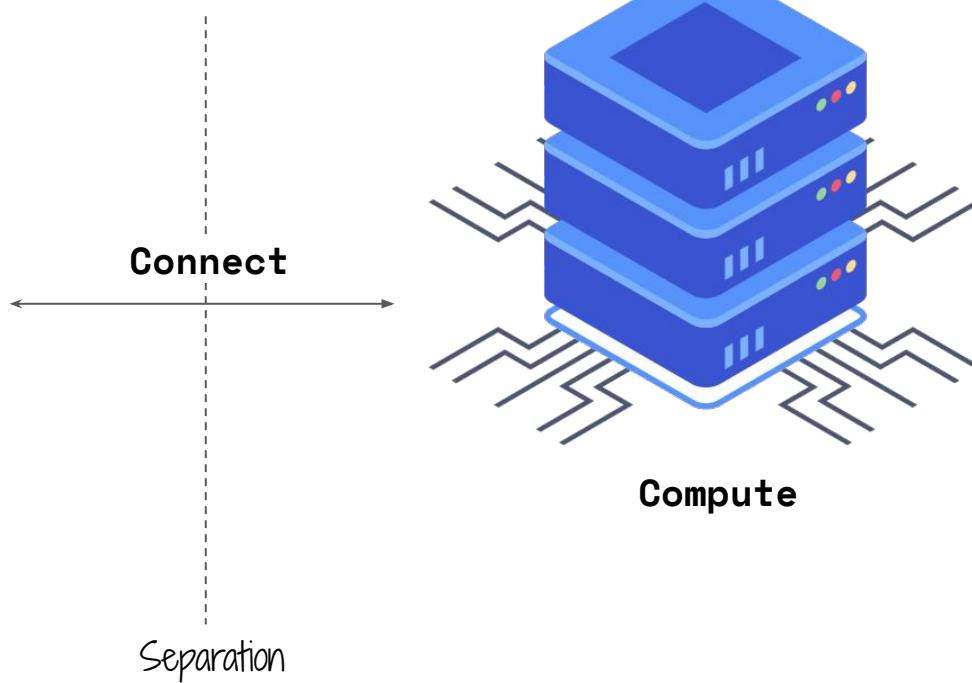
- Vertical → upgrade CPU
- Horizontal → add more CPUs



Vertical Scale

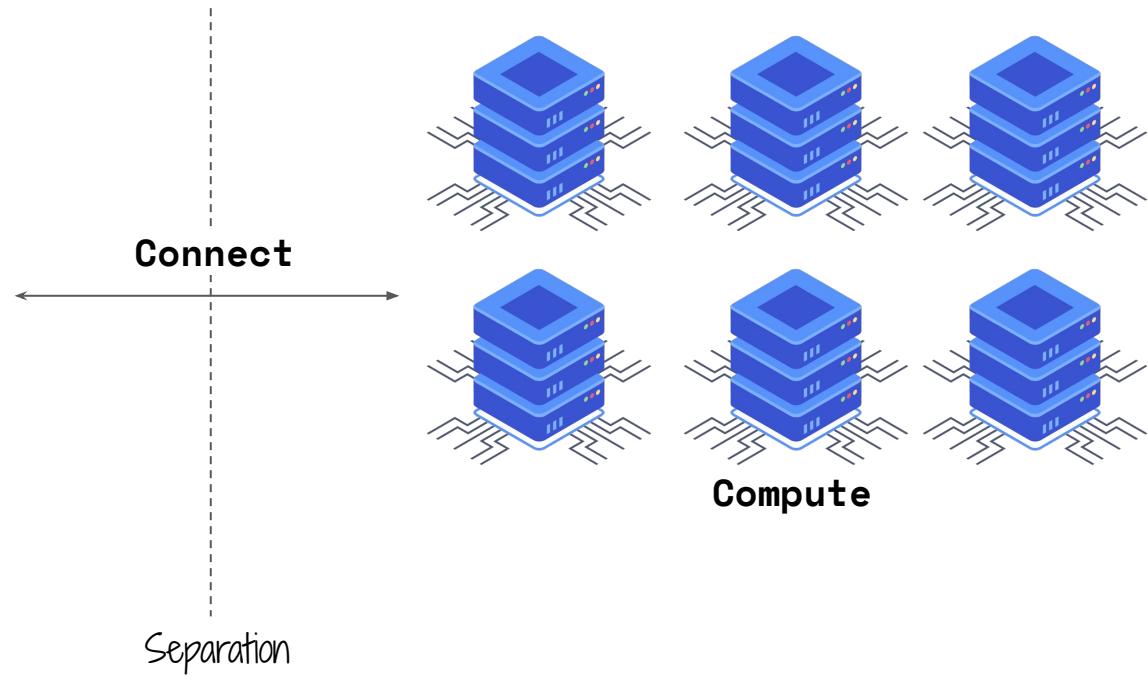
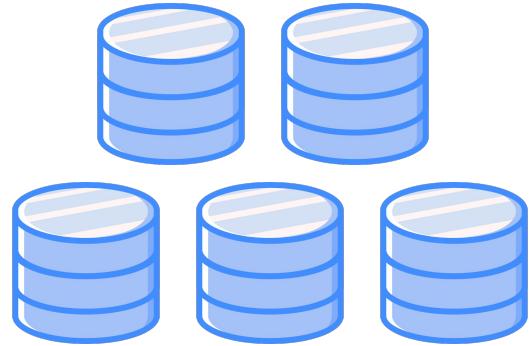


Storage/
Database



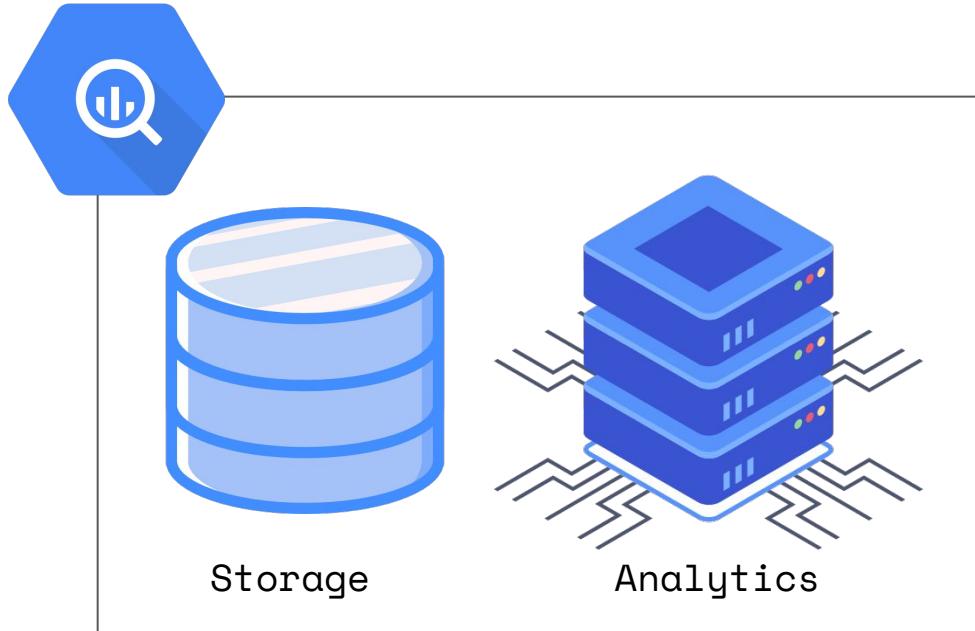


Horizontal Scale





What is Google BigQuery?



What is BigQuery?



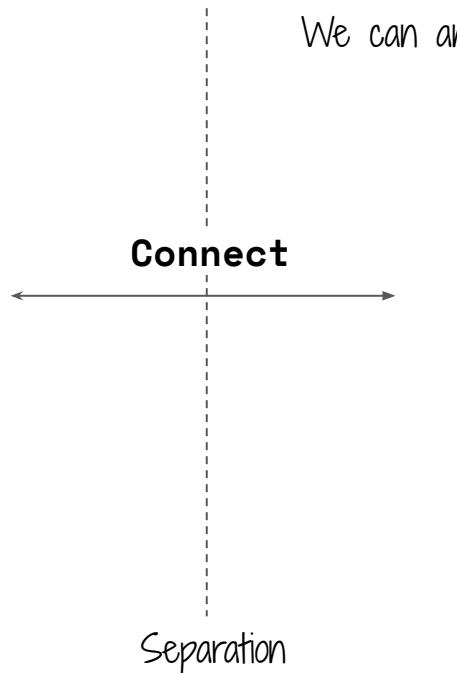
BigQuery is a fully managed enterprise data warehouse that helps you manage and analyze your data with built-in features like machine learning, geospatial analysis, and business intelligence. BigQuery's serverless architecture lets you use SQL queries to answer your organization's biggest questions with zero infrastructure management. BigQuery's scalable, distributed analysis engine lets you query terabytes in seconds and petabytes in minutes.



Google Stack!



**Storage/
Database**



We can analyse data like millions of rows!



Compute

100%

store | 10K Rows Refresh options Schedule refresh

Connection settings Learn more

Chart Pivot table Function Extract Calculated column Column stats

PREVIEW

Row_ID	Order_ID	Order_Dat	Ship_Date	Ship_Modi	Customer_	Customer_	Segment	Country	City	State	Postal_Co	Region	Product_I	Category	Sub_Cateq	Prod	
6231	CA-2017-127656	7/11/2017	7/17/2017	Standard Class	NW-18400	Natalie Webber	Consumer	United States	Waterloo	Iowa	50701	Central	OFF-AR-1000116	Office Supplies	Art	Staples	
4190	CA-2016-157714	9/26/2016	10/1/2016	Second Class	CS-12175	Charles Sheldon	Corporate	United States	Iowa City	Iowa	52240	Central	OFF-PA-1000402	Office Supplies	Paper	Hamm	
3426	CA-2015-153381	9/24/2015	9/28/2015	Standard Class	DE-13255	Deanna Eno	Home Office	United States	Dubuque	Iowa	52001	Central	OFF-BI-1000152	Office Supplies	Binders	Acco P	
3427	CA-2015-153381	9/24/2015	9/28/2015	Standard Class	DE-13255	Deanna Eno	Home Office	United States	Dubuque	Iowa	52001	Central	FUR-CH-1000091	Furniture	Chairs	Hon Ol	
8001	US-2015-151407	11/8/2015	11/12/2015	Standard Class	RD-19585	Rob Dowd	Consumer	United States	Dubuque	Iowa	52001	Central	TEC-PH-1000381	Technology	Phones	Cisco S	
8416	CA-2017-107265	4/6/2017	4/12/2017	Standard Class	ML-17755	Max Ludwig	Home Office	United States	Marion	Iowa	52302	Central	OFF-PA-1000047	Office Supplies	Paper	Easy-st	
9251	CA-2016-105354	12/2/2016	12/6/2016	Standard Class	PW-19030	Paulina Webber	Corporate	United States	Marion	Iowa	52302	Central	OFF-BI-1000110	Office Supplies	Binders	GBC W	
9915	CA-2017-160927	1/29/2017	1/31/2017	Second Class	TM-21010	Tamara Manning	Consumer	United States	Marion	Iowa	52302	Central	OFF-PA-1000384	Office Supplies	Paper	Xerox T	
9916	CA-2017-160927	1/29/2017	1/31/2017	Second Class	TM-21010	Tamara Manning	Consumer	United States	Marion	Iowa	52302	Central	OFF-PA-1000017	Office Supplies	Paper	Xerox T	
9917	CA-2017-160927	1/29/2017	1/31/2017	Second Class	TM-21010	Tamara Manning	Consumer	United States	Marion	Iowa	52302	Central	OFF-ST-10000159	Office Supplies	Storage	Tenex F	
9918	CA-2017-160927	1/29/2017	1/31/2017	Second Class	TM-21010	Tamara Manning	Consumer	United States	Marion	Iowa	52302	Central	FUR-FU-1000001	Furniture	Furnishings	DAX Va	
1009	US-2017-106705	12/26/2017	1/1/2018	Standard Class	PO-18850	Patrick O'Brill	Consumer	United States	Burlington	Iowa	52601	Central	OFF-PA-1000150	Office Supplies	Paper	Recycle	
9210	CA-2017-142776	12/11/2017	12/14/2017	Second Class	RS-19870	Roy Skaria	Home Office	United States	Burlington	Iowa	52601	Central	OFF-EN-1000316	Office Supplies	Envelopes	Pastel I	
9211	CA-2017-142776	12/11/2017	12/14/2017	Second Class	RS-19870	Roy Skaria	Home Office	United States	Burlington	Iowa	52601	Central	OFF-BI-1000201	Office Supplies	Binders	Wilson	
771	CA-2017-104220	1/30/2017	2/5/2017	Standard Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	OFF-BI-1000103	Office Supplies	Binders	Cardina	
772	CA-2017-104220	1/30/2017	2/5/2017	Standard Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	TEC-PH-1000461	Technology	Phones	AT&T 8	
773	CA-2017-104220	1/30/2017	2/5/2017	Standard Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	OFF-BI-1000030	Office Supplies	Binders	GBC In	
774	CA-2017-104220	1/30/2017	2/5/2017	Standard Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	OFF-BI-1000391	Office Supplies	Binders	DXL An	
775	CA-2017-104220	1/30/2017	2/5/2017	Standard Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	OFF-AR-1000464	Office Supplies	Art	Boston	
Preview of 10K rows		7:56 AM	Refresh preview	...	Class	BV-11245	Benjamin Venier	Corporate	United States	Des Moines	Iowa	50315	Central	FUR-FU-1000259	Furniture	Furnishings	C-Line I
3522		CA-2016-114482	11/21/2016	11/25/2016	Second Class	LC-16870	Lena Cacioppo	Consumer	United States	Des Moines	Iowa	50315	Central	OFF-PA-1000002	Office Supplies	Paper	Xerox 2
3522		CA-2016-114482	11/21/2016	11/25/2016	Second Class	DM-13345	Denise Monton	Corporate	United States	Des Moines	Iowa	50315	Central	OFF-PA-1000384	Office Supplies	Paper	Xerox 1

Sheet1 schedules Extract 2 Extract 1 store

<