

# Welcome to the wonderful world of Excel!

DATA ANALYSIS IN EXCEL



Jen Bricker

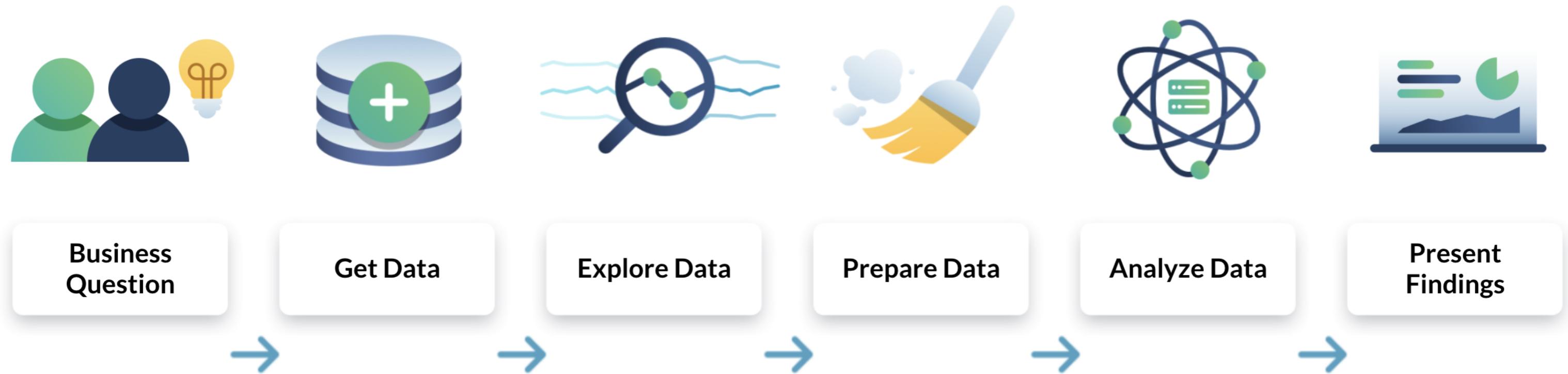
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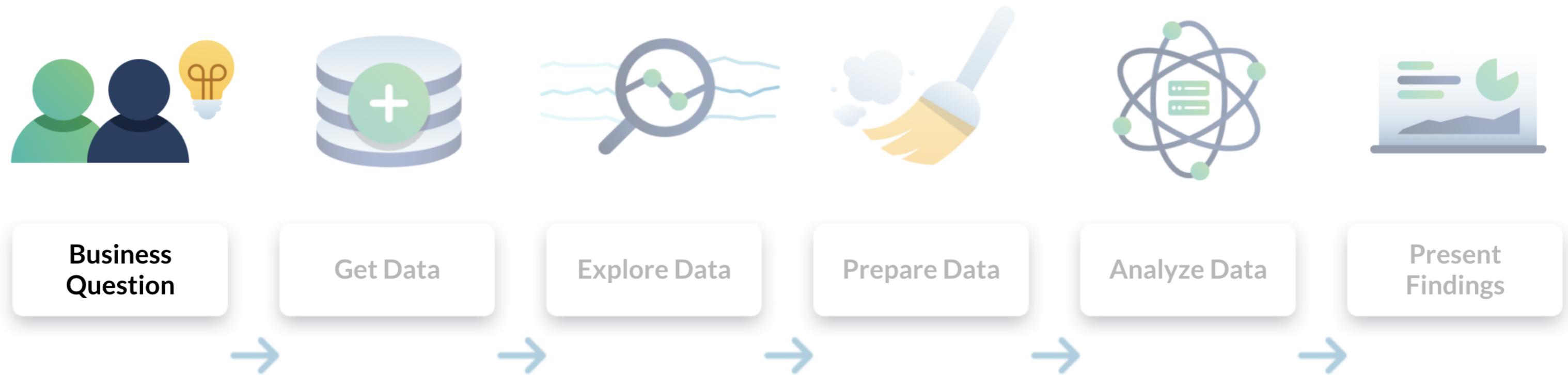
# Excel



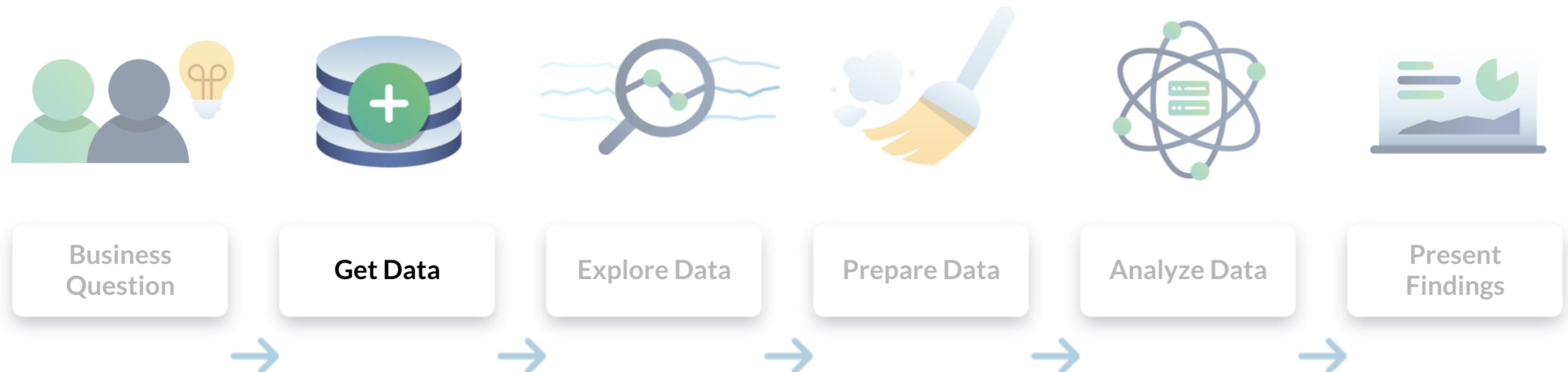
# Data analysis process



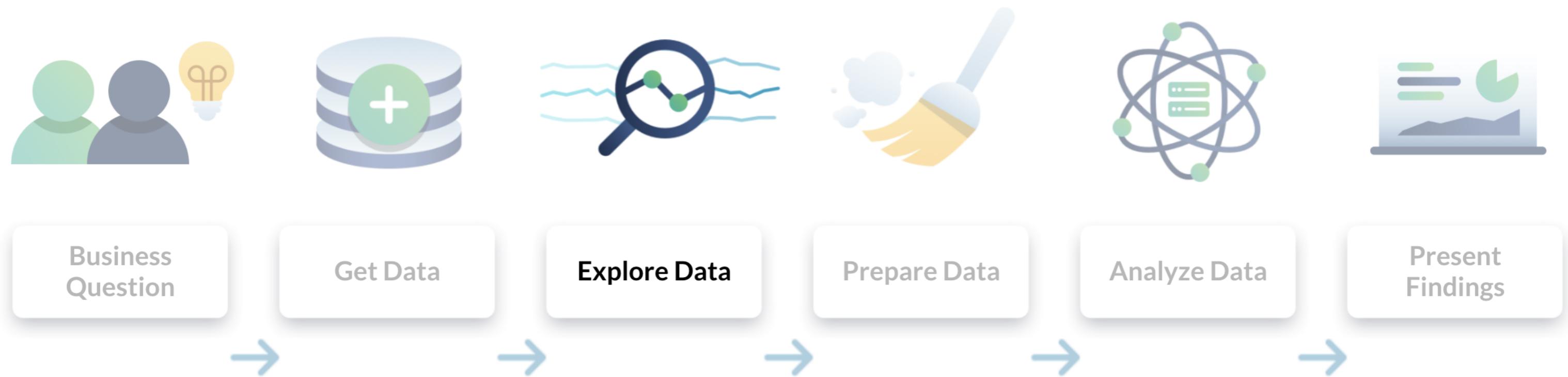
# Data analysis process



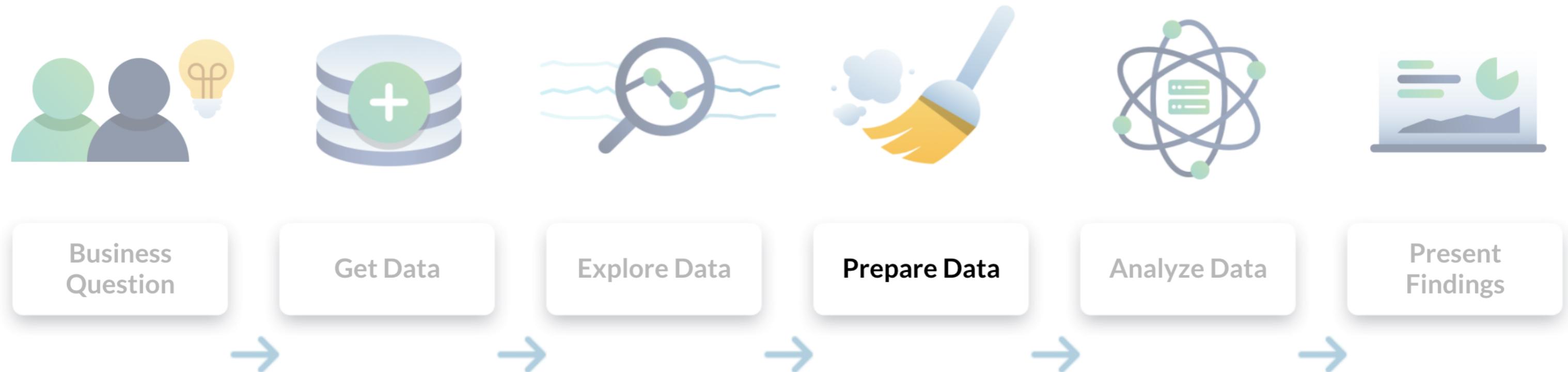
# Data analysis process



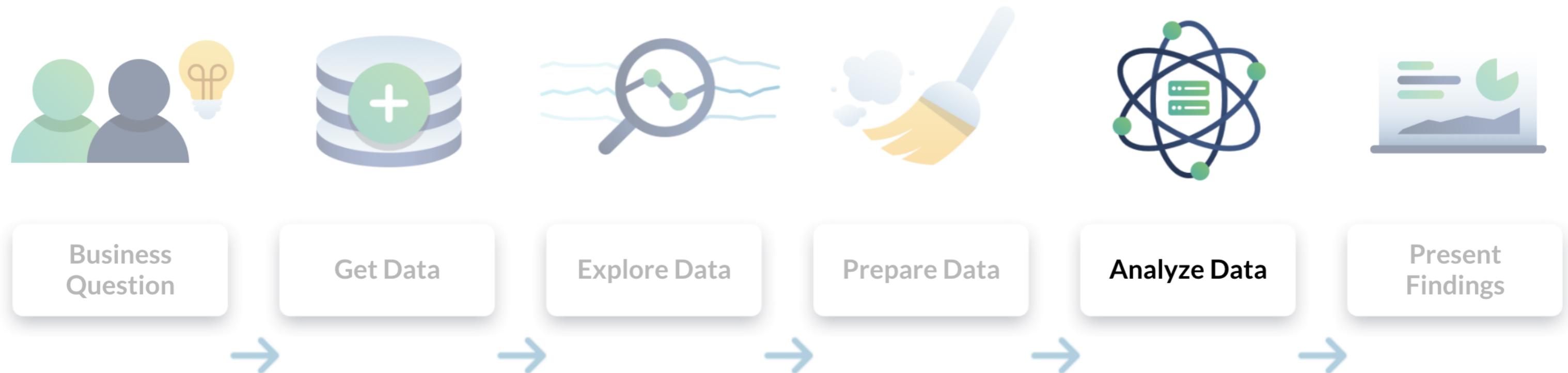
# Data analysis process



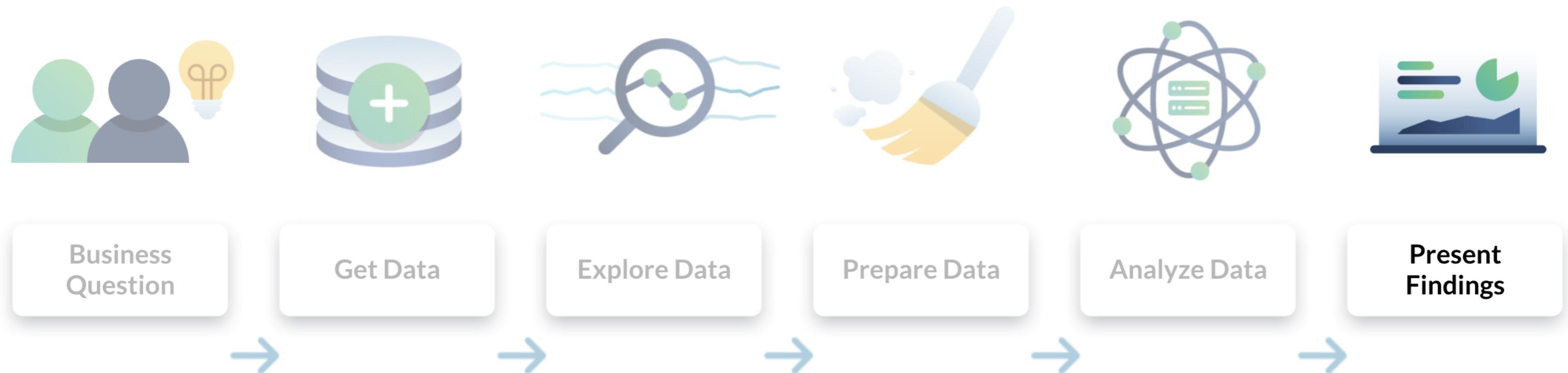
# Data analysis process



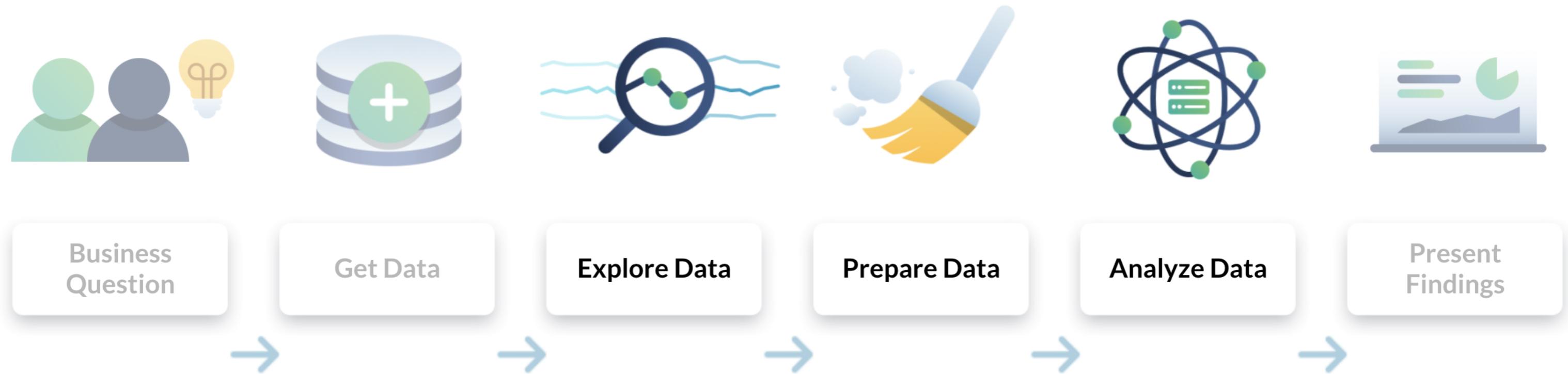
# Data analysis process



# Data analysis process



# Course focus



# Data table formatting

A	B		C	D
1	id	name	created_at	launched_at
2	952844010	Hydrate Edge   Hydration Monitoring Wearable (Canceled)	2-7-2013	30-8-2016
3	1299500496	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	30-10-2013	13-2-2014
4	1613449735	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	30-1-2014	9-6-2014
5	273890115	ProfileMyRun: Run the Right Way, Run the Natural Way	30-4-2014	10-10-2014
6	353045033	365 DAZE - Apple Watch minimal wallpapers	9-5-2014	19-10-2018
7	159764729	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	18-6-2014	17-8-2014
8	906749645	UV Anti-Cancer Melanoma Skin Protection James Prattas Co	30-7-2014	5-10-2014
9	661560435	DAZLN: NFC Nails that Light Up Holiday Parties!	24-9-2014	4-11-2014
10	439377345	Vivir Wearable Technology - Heated Fitness Apparel	5-10-2014	26-1-2015
11	1253217418	jmpLite - The first human powered safety light for runners	6-10-2014	4-11-2014
12	375787146	3D My Kicks - 3dmykicks.com	14-10-2014	31-10-2014
13	946017695	Sole Spa, pedicure while you walk!!! (Canceled)	25-10-2014	7-11-2014
14	1320781728	iPhanny	25-10-2014	29-10-2014
15	1950299864	Fineck: The World,Äôs First Wearable Device For Your Neck	3-11-2014	26-11-2014
16	431595117	CHIPS-Æ - Universal Bluetooth Wireless All-In-One Headphones	12-11-2014	2-12-2014
17	1982588641	Stompz - The World of Virtual Reality at Your Feet	4-1-2015	11-3-2015

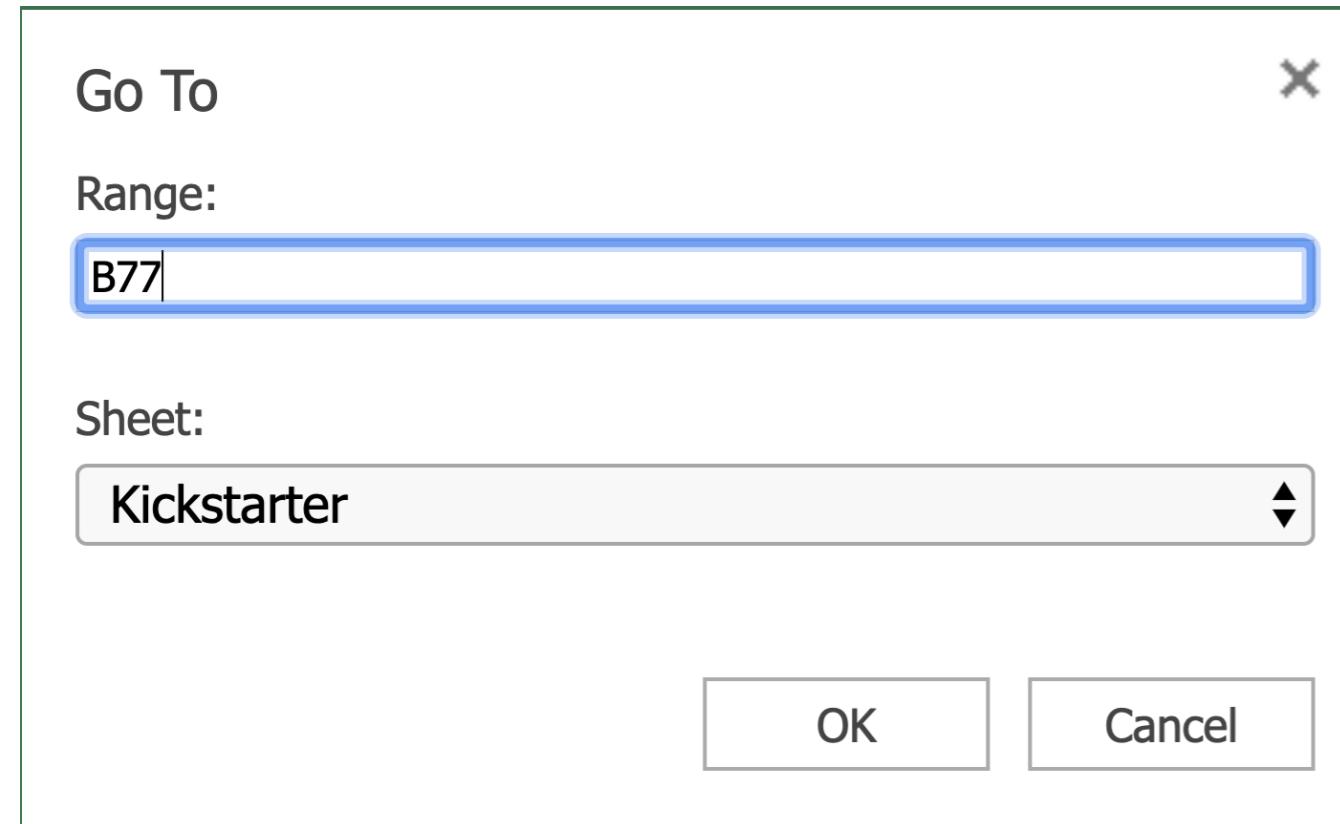
# Navigating Excel



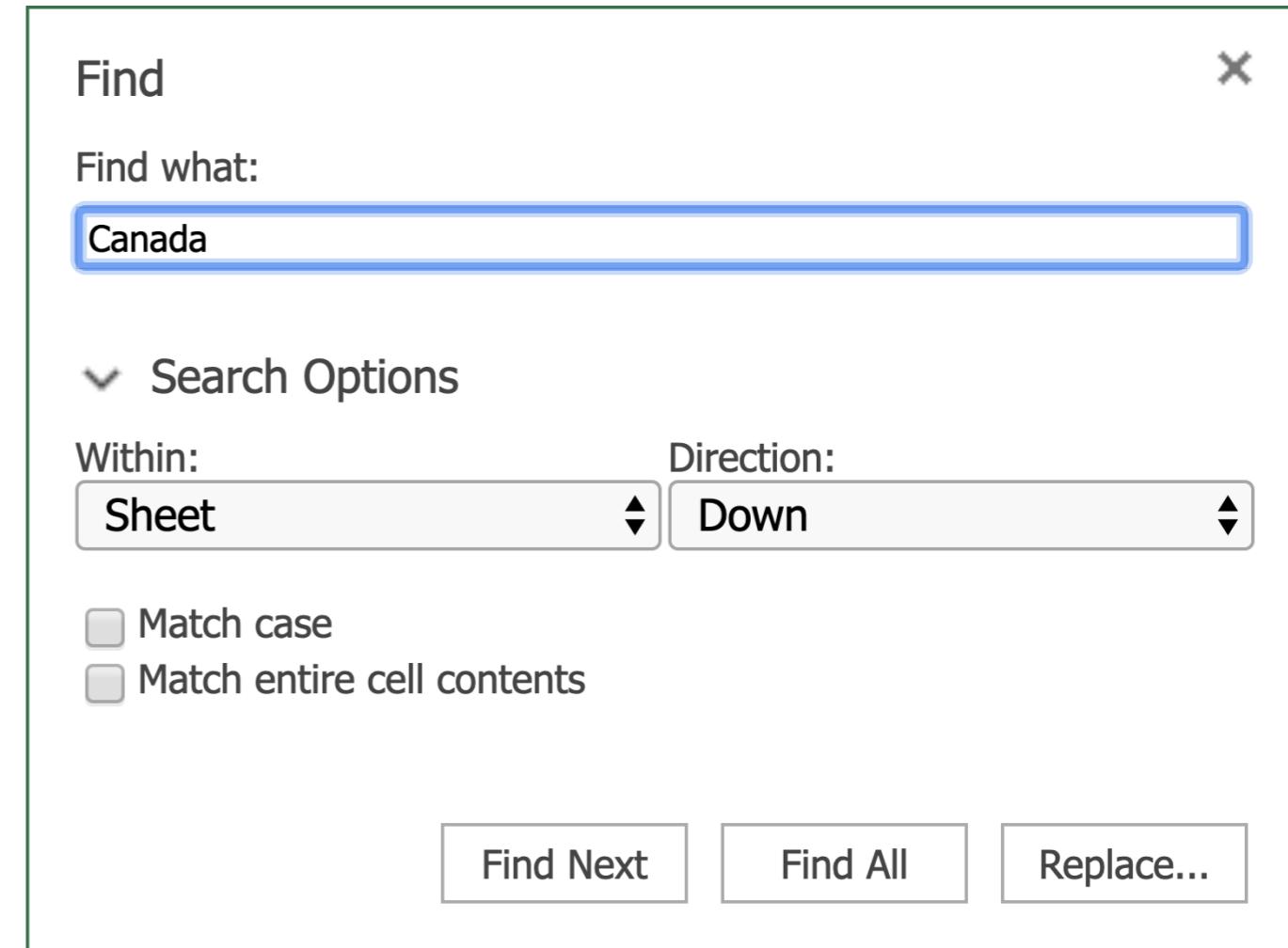
CTRL for PC and CMD for Mac

Shortcut	Description
CMD/CTRL + Arrow Key	Jump to the next blank cell in that direction
Page Up/Down/Left/Right	Jump one screen in that direction

# Keyboard shortcuts



- **CMD/CTRL + G**



- **CMD/CTRL + F**

# **Let's practice!**

**DATA ANALYSIS IN EXCEL**

# Exploring data in Excel

DATA ANALYSIS IN EXCEL



**Jen Bricker**

Head of Instructor Success, DataCamp

# KICKSTARTER

## NECKAIR: Portable Neck Muscle Massager and Warmer

10 adjustable massage levels | Far infrared warmer | Pack down small | Top-grade medical silicone | Foolproof remote control



⌚ Dispositivi Indossabili

📍 Middletown, DE

€89,024 

pledged of €2,722 goal

1,345

backers

15

days to go

Back this project

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Remind me



All or nothing. This project will only be funded if it reaches its goal by Thu, April 16 2020 2:30 PM CEST.

# Comparing values

	I	J
1	pledged	usd_pledged
2	1748	1748
3	123817,49	123817,49
4	183449,14	183449,14
5	1529	1529
6	42,29	32,4216332
7	5137	8575,53042
8	96	96
9	726	726
10	6473	6473
11	3863	3863

# EXACT() function syntax

*Syntax:*

```
=EXACT(value1, value2)
```

*Example:*

```
=EXACT(I2,J2)
```

	I	J	K
1	pledged	usd_pledged	EXACT match
2	1748	1748	=EXACT(I2,J2)
3	123817.49	123817.49	TRUE
4	183449.14	183449.14	TRUE
5	1529	1529	TRUE
6	42.29	32.4216332	FALSE
7	5137	8575.53042	FALSE
8	96	96	TRUE
9	726	726	TRUE
10	6473	6473	TRUE
11	3863	3863	TRUE

# Removing extra spaces

	A
1	<b>id</b>
2	952844010
3	1299500496
4	1613449735
5	273890115
6	353045033
7	159764729
8	906749645
9	661560435
10	439377345
11	1253217418

# TRIM() function syntax

*Syntax:*

```
=TRIM(value)
```

*Example:*

```
=TRIM(A2)
```

	A	B
1	id	TRIM
2	952844010	=TRIM(A2)
3	1299500496	1299500496
4	1613449735	1613449735
5	273890115	273890115
6	353045033	353045033
7	159764729	159764729
8	906749645	906749645
9	661560435	661560435
10	439377345	439377345
11	1253217418	1253217418

# Sorting data

	C
1	name
2	Hydrate Edge   Hydration Monitoring Wearable (Canceled)
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System
5	ProfileMyRun: Run the Right Way, Run the Natural Way
6	365 DAZE - Apple Watch minimal wallpapers
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel
8	UV Anti-Cancer Melanoma Skin Protection James Pratas Co
9	DAZLN: NFC Nails that Light Up Holiday Parties!
10	Vivir Wearable Technology - Heated Fitness Apparel
11	jmpLite - The first human powered safety light for runners
12	3D My Kicks - 3dmykicks.com
13	Sole Spa, pedicure while you walk!!! (Canceled)
14	iPhanny

# SORT() function syntax

*Syntax:*

```
=SORT(array,[sort_index],[sort_order])
```

*Example:*

```
=SORT(B2:B104,1,-1)
```

- `sort_index` : column number to sort by
- `sort_order` :
  - A to Z: `1`
  - Z to A: `-1`

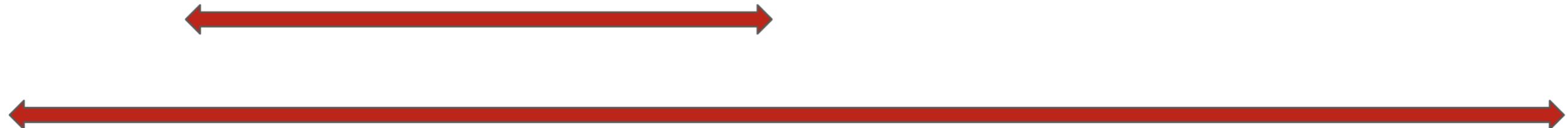
# SORT() function continued

	B	Q	R
1	name		
2	Hydrate Edge   Hydration Monitoring Wearable (Canceled)	=SORT(B2:B104)	
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	3D My Kicks - 3dmykicks.com	
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	8sense - start caring about your back health (Canceled)	
5	ProfileMyRun: Run the Right Way, Run the Natural Way	A wearable sports light to make any cycle jersey illuminate! (Canceled)	
6	365 DAZE - Apple Watch minimal wallpapers	Accessible Health Management Technology	
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	AirPod catcher and a magnetic case for Apple ear buds (Canceled)	
8	UV Anti-Cancer Melanoma Skin Protection James Pratas Co	Anti-pollution Wearable Air Filter (Relaunch)	
9	DAZLN: NFC Nails that Light Up Holiday Parties!	AR for Everyone Augmented/Mixed/Virtual Reality Headset	
10	Vivir Wearable Technology - Heated Fitness Apparel	Automated CANE for the blind	
11	jmpLite - The first human powered safety light for runners	Better Beanie	
12	3D My Kicks - 3dmykicks.com	Brilliant safety backpack	
13	Sole Spa, pedicure while you walk!!! (Canceled)	C'est pour toi	
14	iPhanny	CHIPS-Æ - Universal Bluetooth Wireless All-In-One Headphones	

# Nested formulas

**Nesting:** using a function as part of another function

```
=SORT(FILTER(range,criteria), [sort_index],[sort_order])
```



# FILTER() function syntax

*Syntax:*

```
=FILTER(range, criteria, [if_empty])
```

*Example:*

```
=FILTER(C2:C104, C2:C104>1000)
```

	C	R	S
1	backers_count		FILTER applied
2	15		=FILTER(C2:C104,C2:C104>1000)
3	942		1458
4	1202		1820
5	18		2383
6	7		1889
7	64		6480
8	5		2071
9	9		7501
10	25		
11	101		

# SORT() with FILTER()

*Syntax:*

```
=SORT(FILTER(range,criteria),[sort_index],[sort_order])
```

*Example:*

```
=SORT(FILTER(B2:C104,C2:C104>1000),1,-1)
```

	B	C	R	S	T
1	name	backers_count		SORT with FILTER applied	
2	Hydrate Edge   Hydration Monitoring Wearable (Canceled)	15		=SORT(FILTER(B2:C104,C2:C104>1000),1,-1)	1889
3	Flyfit - Smart Ankle Tracker For Fitness, Cycling & Swimming	942		The World's First Heated Down Jacket w/ 6X Mob	6480
4	KOR-FX Gaming Vest: 4DFX Haptic Feedback System	1202		The Customizable Smart Band that Lights Up Your	2071
5	ProfileMyRun: Run the Right Way, Run the Natural Way	18		PASSFORT - Your digital life, secure!	1458
6	365 DAZE - Apple Watch minimal wallpapers	7		OURA ring. Improve sleep. Perform better.	2383
7	KYMIRA Sport: The Most Advanced Reactive Sports Apparel	64		LVL ,Äì The First Wearable Hydration Monitor	7501
8	UV Anti-Cancer Melanoma Skin Protection James Prattas Co	5		KOR-FX Gaming Vest: 4DFX Haptic Feedback Syste	1202
9	DAZLN: NFC Nails that Light Up Holiday Parties!	9		Jewelbots: Friendship Bracelets That Teach Girls To	1820
10	Vivir Wearable Technology - Heated Fitness Apparel	25			
11	jmpLite - The first human powered safety light for runners	101			

# **Let's practice!**

**DATA ANALYSIS IN EXCEL**

# Understanding data types in Excel

DATA ANALYSIS IN EXCEL



**Jen Bricker**

Head of Instructor Success, DataCamp

# Data types in Excel

- **Text:** strings, numbers or dates represented in a text format
- **Number:** numeric values
- **Date:** dates and times in an accepted date-time representation
- **Boolean:** logical or TRUE/FALSE

# Excel's preset alignment

	A	B	C	D
1	DATE	NUMBER	BOOLEAN	TEXT
2	deadline	goal	staff_pick	status
3	10/14/2016	75000	FALSE	canceled
4	3/25/2014	90000	FALSE	successful
5	7/24/2014	75000	TRUE	successful
6	11/9/2014	50000	FALSE	failed
7	11/24/2018	365	FALSE	failed
8	9/17/2014	5000	FALSE	successful
9	11/1/2014	50000	FALSE	failed
10	11/29/2014	10000	FALSE	failed
11	3/6/2015	22500	FALSE	canceled
12	12/14/2014	50000	FALSE	failed

- **Text:** left aligned
- **Logical:** center aligned
- **Numeric or datetime:** right aligned

# Converting to text

	A
1	<b>id</b>
2	952844010
3	1299500496
4	1613449735
5	273890115
6	353045033
7	159764729
8	906749645
9	661560435
10	439377345
11	1253217418
12	375787146

<sup>1</sup> [https://support.office.com/en—us/excel](https://support.office.com/en-us/excel)

# TEXT() function

*Syntax:*

```
=TEXT(value, format)
```

*Example:*

```
=TEXT(A2, "00000000")
```

	A	B
1	id	TEXT id
2	952844010	=TEXT(A2,"00000000")
3	1299500496	1299500496
4	1613449735	1613449735
5	273890115	273890115
6	353045033	353045033
7	159764729	159764729
8	906749645	906749645
9	661560435	661560435
10	439377345	439377345
11	1253217418	1253217418
12	375787146	375787146

<sup>1</sup> <https://support.office.com/en-us/article/TEXT-function-20D5AC4D-7B94-49FD-BB38-93D29371225C>

# Converting to numbers

L	usd_pledged
1	\$1748
2	\$123817.49
4	\$183449.14
5	\$1529
6	\$32.4216332
7	\$8575.53042
8	\$96
9	\$726
10	\$6473
11	\$3863
12	\$37

# VALUE() function syntax

*Syntax:*

```
=VALUE(text)
```

*Example:*

```
=VALUE(L2)
```

	L	M
1	usd_pledged	VALUE usd_pledged
2	\$1748	=VALUE(L2)
3	\$123817.49	123817.49
4	\$183449.14	183449.14
5	\$1529	1529
6	\$32.4216332	32.4216332
7	\$8575.53042	8575.53042
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863
12	\$37	37

# Rounding numbers

	L	M
1	usd_pledged	VALUE usd_pledged
2	\$1748	=VALUE(L2)
3	\$123817.49	123817.49
4	\$183449.14	183449.14
5	\$1529	1529
6	\$32.4216332	32.4216332
7	\$8575.53042	8575.53042
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863
12	\$37	37

# ROUND() with VALUE()

*Syntax:*

```
=ROUND(VALUE(text), decimal places)
```

*Example:*

```
=ROUND(VALUE(L2), 0)
```

	L	M
1	usd_pledged	VALUE & ROUND
2	\$1748	usd_pledged
3	\$123817.49	123817
4	\$183449.14	183449
5	\$1529	1529
6	\$32.4216332	32
7	\$8575.53042	8576
8	\$96	96
9	\$726	726
10	\$6473	6473
11	\$3863	3863

# **Let's practice!**

**DATA ANALYSIS IN EXCEL**