

# Excel first steps

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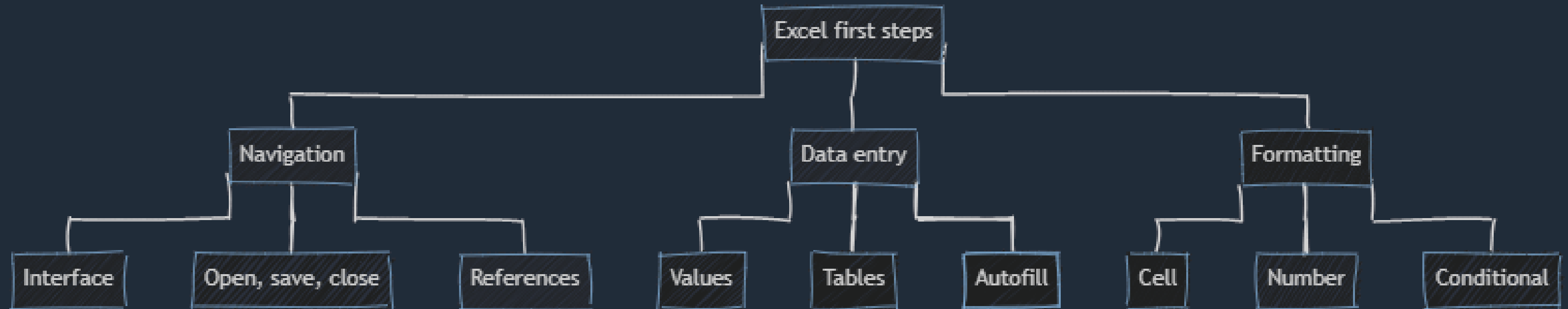
# Welcome

- this session is 🐣: a beginner-level introduction
- we'll get going properly at 13.35
- if you can't access the chat, you might need to join our Teams channel:  
[tinyurl.com/kindnetwork](https://tinyurl.com/kindnetwork)
- you're very welcome to just watch, but if you want to follow along, you'll need Excel of some sort
  - totally informal and chatty, so cameras on etc etc
- also want to plug the M365 Skills Hub for NHSS folks

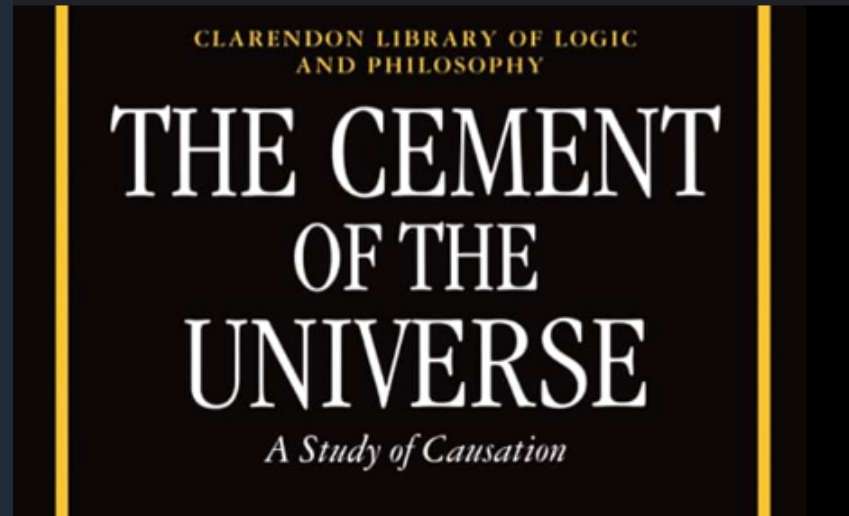
# The KIND network

- a social learning space for staff working with knowledge, information, and data across health, social care, and housing in Scotland
- we offer social support, free training, mentoring, community events, ...
- Teams channel / mailing list

# Session outline



# A brief overview of Excel



- one of the oldest, and most widely used, pieces of desktop software
- ubiquitous in business, finance, health and social care...
- proprietary, closed-source, paid-for
- many versions

# Central idea

- pieces of data are stored in cells
  - one value, one cell
- cells are arranged into rows and columns

	A	B	C	D	E	
1						
2				↑		
3	←	row	→	column		
4				↓		
5						
6						

- arranging data like this allows us to analyse it
- good data analysis helps make services better

# Data should help...

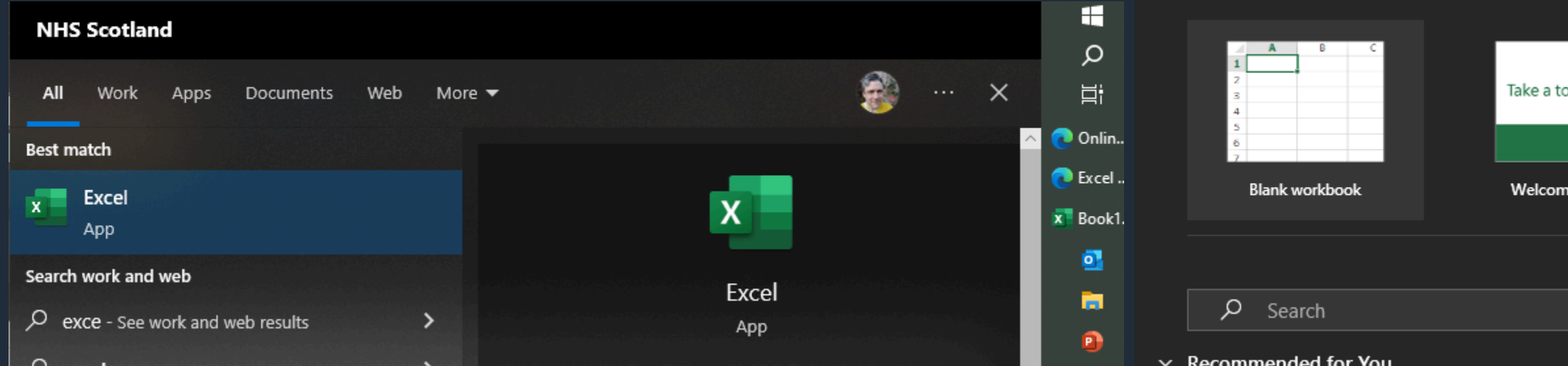
- answering which/when questions
- seeing effects of changes
- comparing different areas
- looking at services over time
- ...

# One word of warning before the practical part

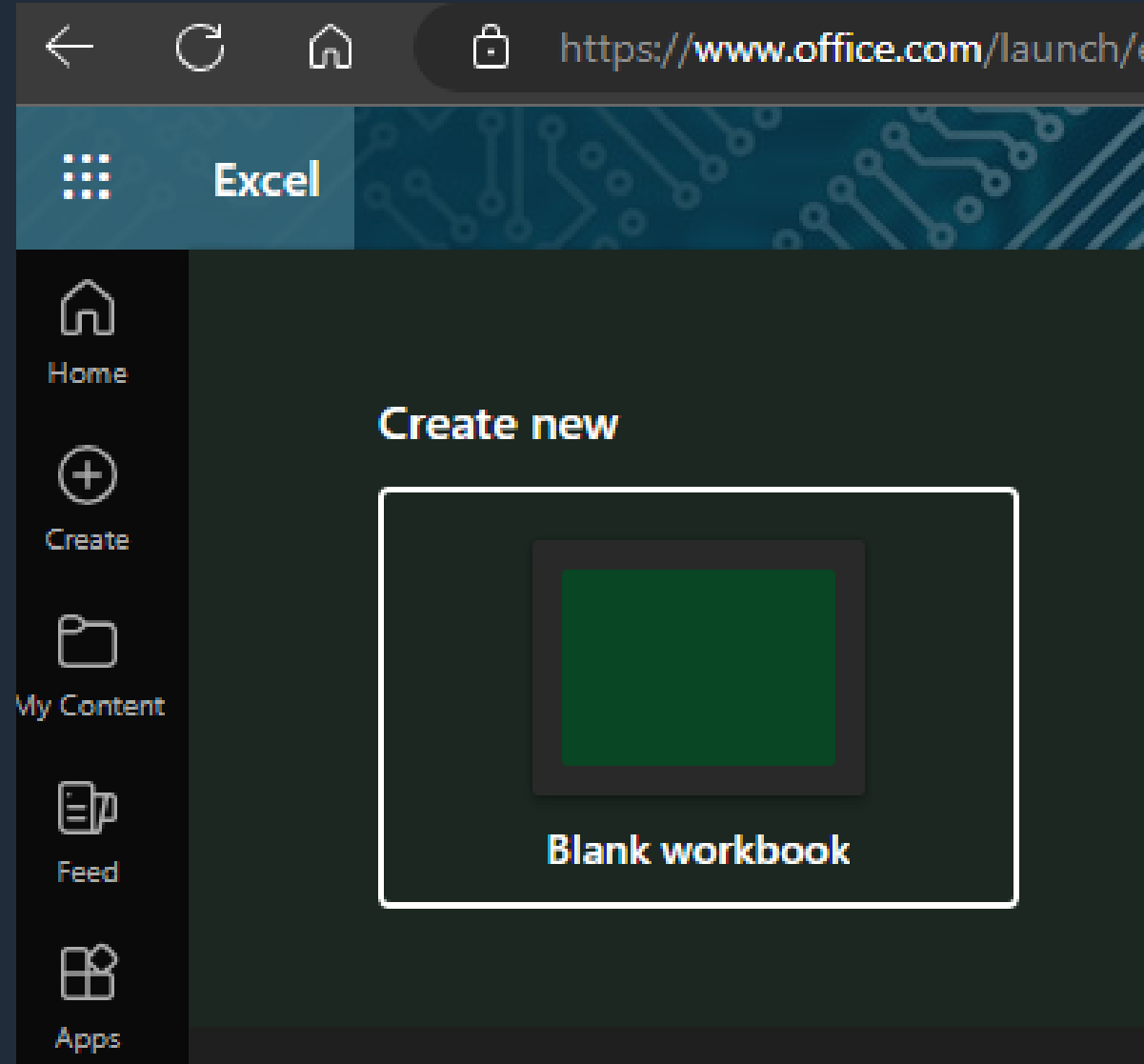
- there are lots of versions of Excel
- they all work slightly differently
- please don't panic if what you see looks slightly different from what I'm showing you
- please ask if you're not happy/confident!



# Opening Excel (desktop)



# Opening Excel (web)



# Interface

AutoSave On

File Home Insert Page Layout Formulas Data Review View Automate Help Table Design

Clipboard

Font

Alignment

Number

Styles

Cells

Editing

Analysis

Sensitivity

Comments Share

E12

Formula bar

Berend Anyla

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	date	service_a	service_b	service_c	duty_man									
2	12/31/2021	91	162	131	Ajiana Calilynn									
3	01/01/2022	89	163	134	Ajiana Calilynn									
4	01/02/2022	87	169	140	Berend Anyla									
5	01/03/2022	87	172	149	Ajiana Calilynn									
6	01/04/2022	85	178	154	Berend Anyla									
7	01/05/2022	83	176	159	Ajiana Calilynn									
8	01/06/2022	81	170	161	Ajiana Calilynn									
9	01/07/2022	79	167	164	Berend Anyla									
10	01/08/2022	79	166	169	Ajiana Calilynn									
11	01/09/2022	77	170	175	Berend Anyla									
12	01/10/2022	77	179	183	Berend Anyla									
13	01/11/2022	75	180	188	Berend Anyla									
14	01/12/2022	74	180	190	Jayzeon Naliyah									
15	01/13/2022	72	180	186	Anayssa Zyran									
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														

service\_use


Ribbon

Formula bar

Worksheet tabs

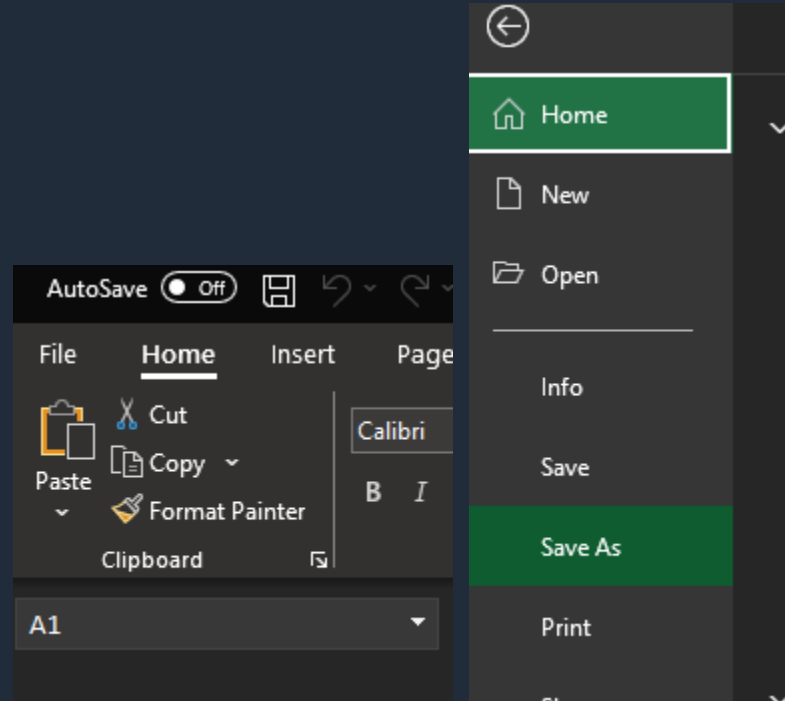
KIND

Learning Network



NHS  
Education  
for  
Scotland

# Save, close, open



- save your new workbook
- close it
- re-open it (possibly from recent files)

# References

- every cell in Excel has a **reference** - like its address
- references look like this: **E7**

	A	B	C	D	E	F	G	H	I
1	date	service_a	service_b	service_c	duty_manager				
2	12/31/2021	91	162	131	Ajiana Calilynn				
3	01/01/2022	89	163	134	Ajiana Calilynn				
4	01/02/2022	87	169	140	Berend Anyla				
5	01/03/2022	87	172	149	Ajiana Calilynn				
6	01/04/2022	85	178	154	Berend Anyla				
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13	01/11/2022	75	180	188	Berend Anyla				
14	01/12/2022	74	180	190	Jayleen Naliyah				
15	01/13/2022	72	180	186	Anaysha Zyan				
16									
17									
18									
19									
20									
21									

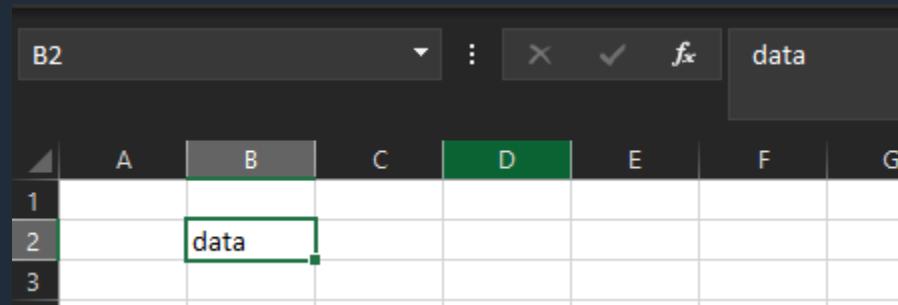
← Row (7) →

← Column (E) →

- **E** refers to a vertical column
- **7** to a horizontal row

# Data entry

- let's add some data...
- we can type into the cells



- that data appears in the formula bar too


# An example: school holidays

- <https://www.scotborders.gov.uk/schools-learning/term-holiday-closure-dates/2>
- make three headings in row 1: **name**, **start\_date**, **end\_date**

	A	B	C
1	name	start_date	end_date
2			



# Values

- let's add some values from the school holidays webpage
- name of holiday
- start date
- end date
  - dates usually go **DD/MM/YYYY** - as we'll see, Excel does lots of helping when we enter dates...
  - ... 
- we'll only need a few rows of data

# Tidy data

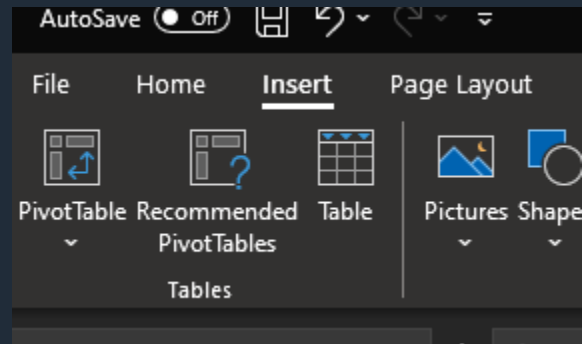
- keep things consistent - spelling, case, formats, etc
  - one piece of data per cell
  - one instance per row (one school holiday per row)
  - one variable per column (a column of names, one of start dates...)

# Tables

- we can convert this group of cells into a proper **table**
- click in one of your cells of data

Mid-term holi	14/10/2024
In service day	21/10/2024
St Andrew's D	02/12/2024

- **Insert > Table** (or **Ctrl + T**)



- click **OK**

	A	B	C
1	name	start_date	end_date
2	Mid-term holi	14/10/2024	18/10/2024
3	In service day	21/10/2024	21/10/2024
4	St Andrew's D	02/12/2024	02/12/2024
5			
6			

Create Table

Where is the data for your table?

☒ My table has headers

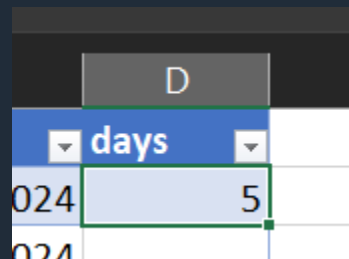
OK Cancel

# Lots of new things to see

	A	B	C	
1	name ▼	start_date ▼	end_date ▼	
2	Mid-term holi	14/10/2024	18/10/2024	
3	In service day	21/10/2024	21/10/2024	
4	St Andrew's D	02/12/2024	02/12/2024	
5				

# Autofill

- we'll add a formula to calculate how long our holidays are
- add a new column called **days**
- paste =  $1 + (C2 - B2)$  into the first cell of that new column
  - and look out for our session on formulas...
- double-click the green fill handle to fill the rest of the column



The screenshot shows a portion of an Excel spreadsheet. The column header 'D' is visible at the top. Below it, the first cell of the new column is labeled 'days' in a blue header cell. The second cell in this column contains the number '5'. A green fill handle is visible on the right side of the cell containing '5', indicating it is selected or about to be filled.

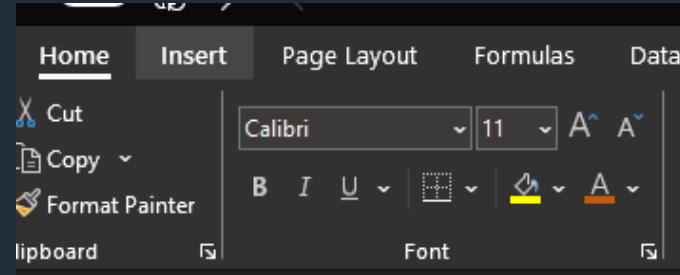
	D
	days
024	5
024	

# Formatting

- we can change the way that our spreadsheet looks
- we can also change the way our values look

# Cell formatting

- some examples



- highlighting
- bold
- borders



# Number formatting

- our dates are **number formatted**
- Excel dates are actually numbers (like **45583**) formatted to look like dates
- 1900 dates!
- percentages, £, ...

# Conditional formatting

- we can also format based on values

	A	B	C	D	
1	name	start_date	end_date	days	
2	Mid-term holic	14/10/2024	18/10/2024	5	
3	In service day	21/10/2024	21/10/2024	1	
4	St Andrew's Da	02/12/2024	02/12/2024	1	
5					

- take care though - this can be both ugly, and inaccessible

# Excel training sessions

Session	Date	Level
Tidy data in Excel	09:30-10:30 Fri 28th June 2024	🌶️ :beginner-level
Excel tables	10:00-10:30 Mon 1st July 2024	🌶️ :beginner-level
Formulas in Excel	15:00-16:00 Wed 3rd July 2024	🌶️ :beginner-level
Lambda formulas in Excel	13:00-13:30 Mon 15th July 2024	🌶️🌶️ : intermediate-level

# Feedback

- please complete our 1-minute, anonymous, feedback survey
- feedback comments become public, so please keep it clean!

**Previous attendees have said...** [🔗](#)

- 20 previous attendees have left feedback
- 100% said that this session was pitched correctly
- 100% would recommend this session to a colleague

**📄 Three random comments from previous attendees**

- A simple and comprehensive introduction to why PBI is a good tool. It gives me should look into learning PBI.
- Very Helpful. It's in my PDP for this year to explore Power BI and how it can be in team - We're quite a data heavy team. The session gave a brief insight on how ea