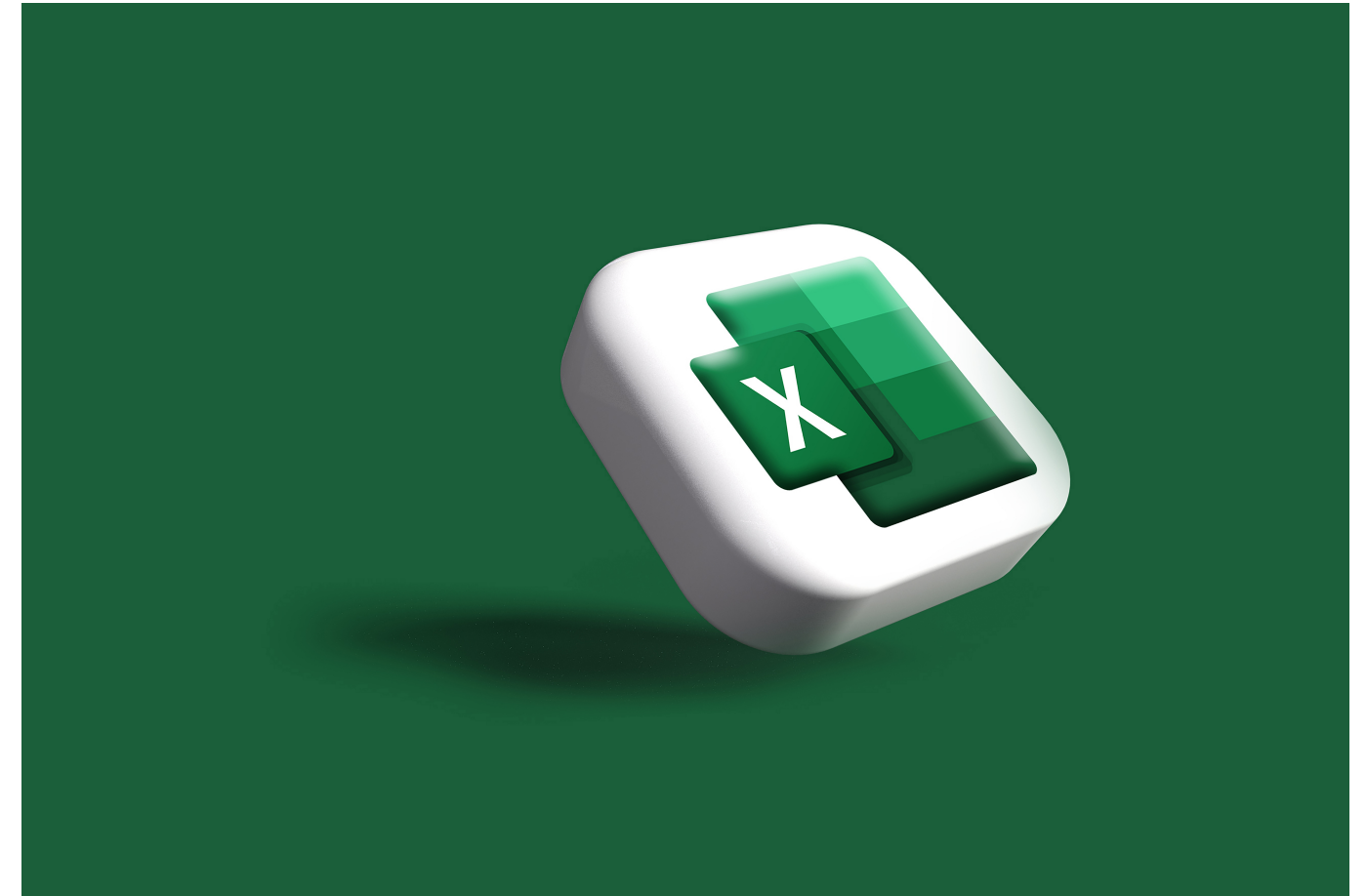# Introduction to Excel

INTRODUCTION TO EXCEL

Jess Ahmet
Curriculum Manager, DataCamp

What is Excel?

- Popular spreadsheet software developed by Microsoft

- Insert, read, and manipulate **data**

- Relied on by businesses of all sizes

- Also useful for personal tasks

- **Free** version:
  - Cloud-based, limited features
  - Basic tasks

- **Paid** version
  - Local, used in this course
 - Advanced capabilities

Why Excel?

Excel can be used to store, process, analyze, and visualize data

- Designed for technical and non-technical users

- User-friendly interface

- Supports collaboration via shared workbooks, co-authoring, and commenting

- Templates to get you started with common tasks
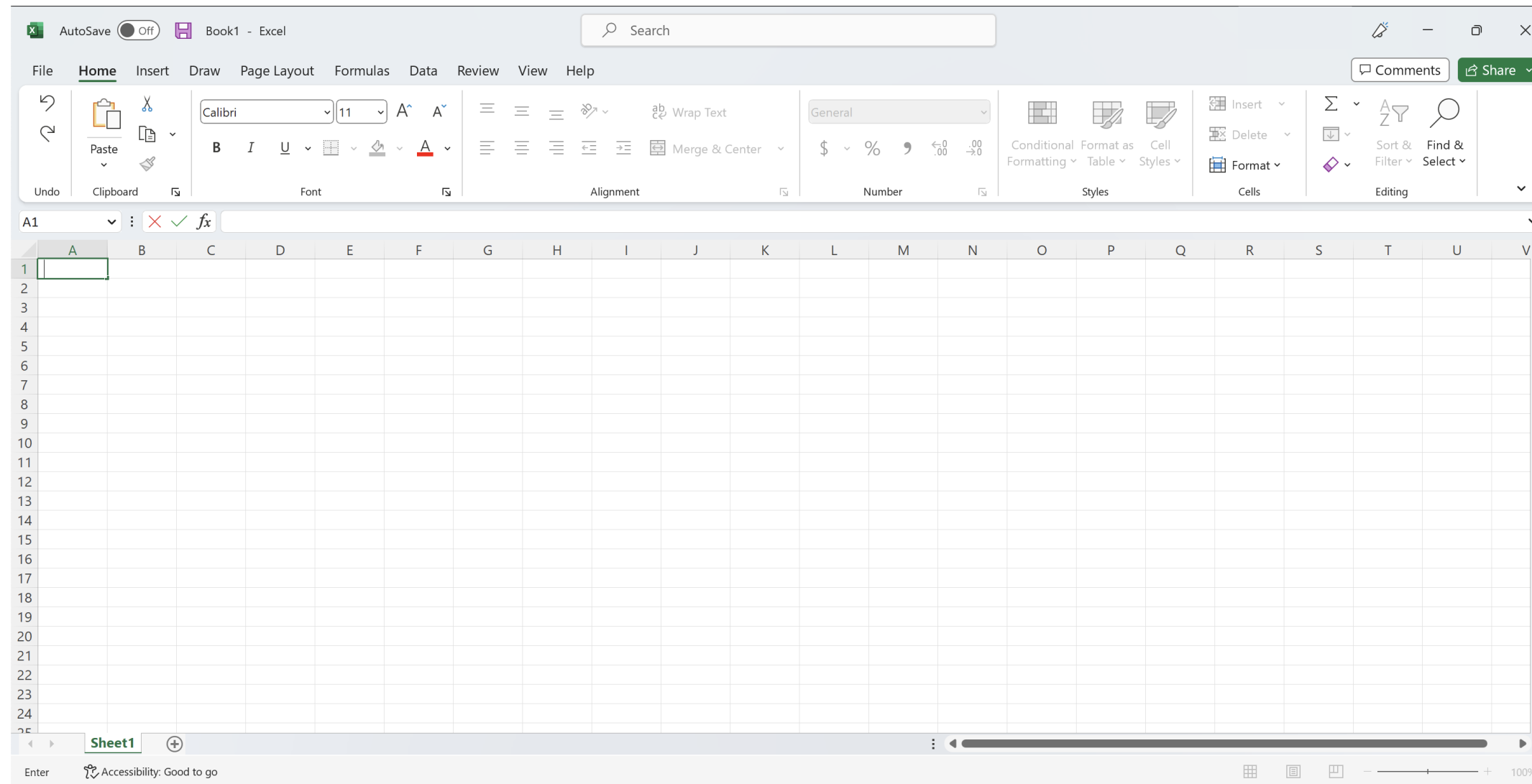
Limitations

| Feature	Max Limit
Opening workbooks	Limited by **available memory** and **system** resources
Total **number of rows and columns** on a worksheet	1,048,576 rows by 16,384 columns

Excel interface
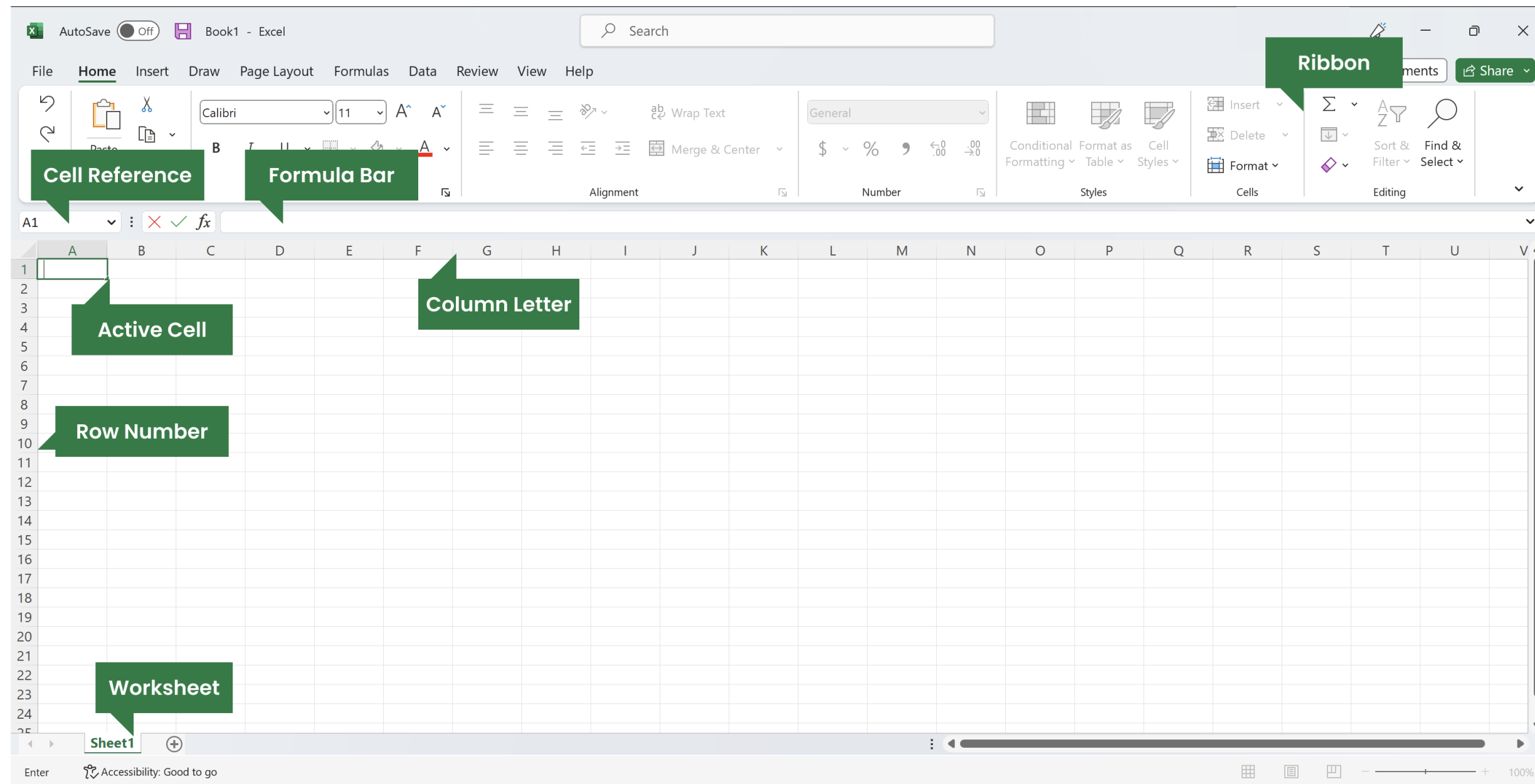
Key definitions

- **Workbook:** An Excel file containing one or more worksheets to help you organize all your data

Key definitions

- **Worksheet:** primary area that you'll work in often referred to as a sheet or spreadsheet. Consists of cells organized into columns and rows. Also known as a sheet
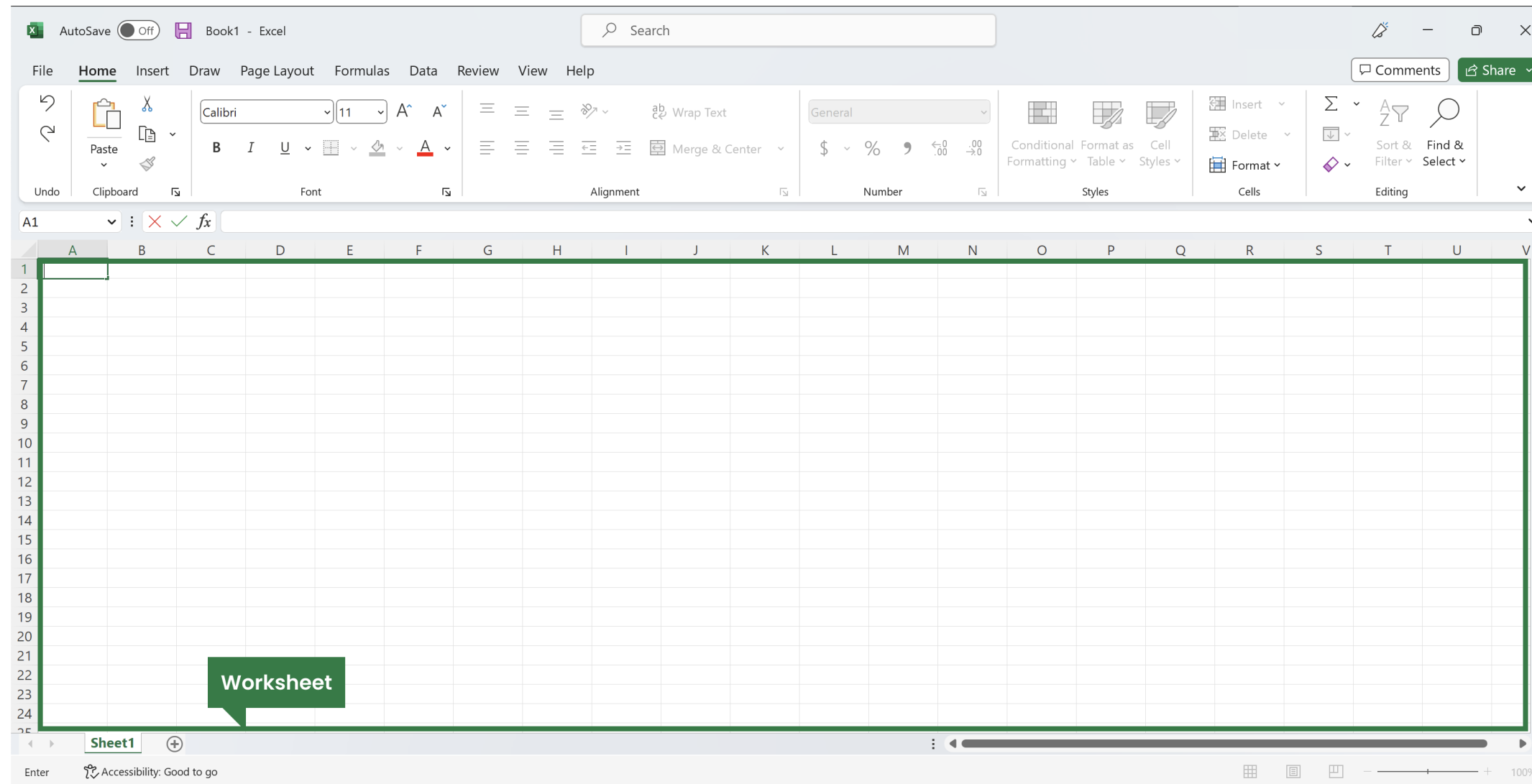
Key definitions

- **Cell**: box at the intersection of the grid where a row or column meet where information is contained
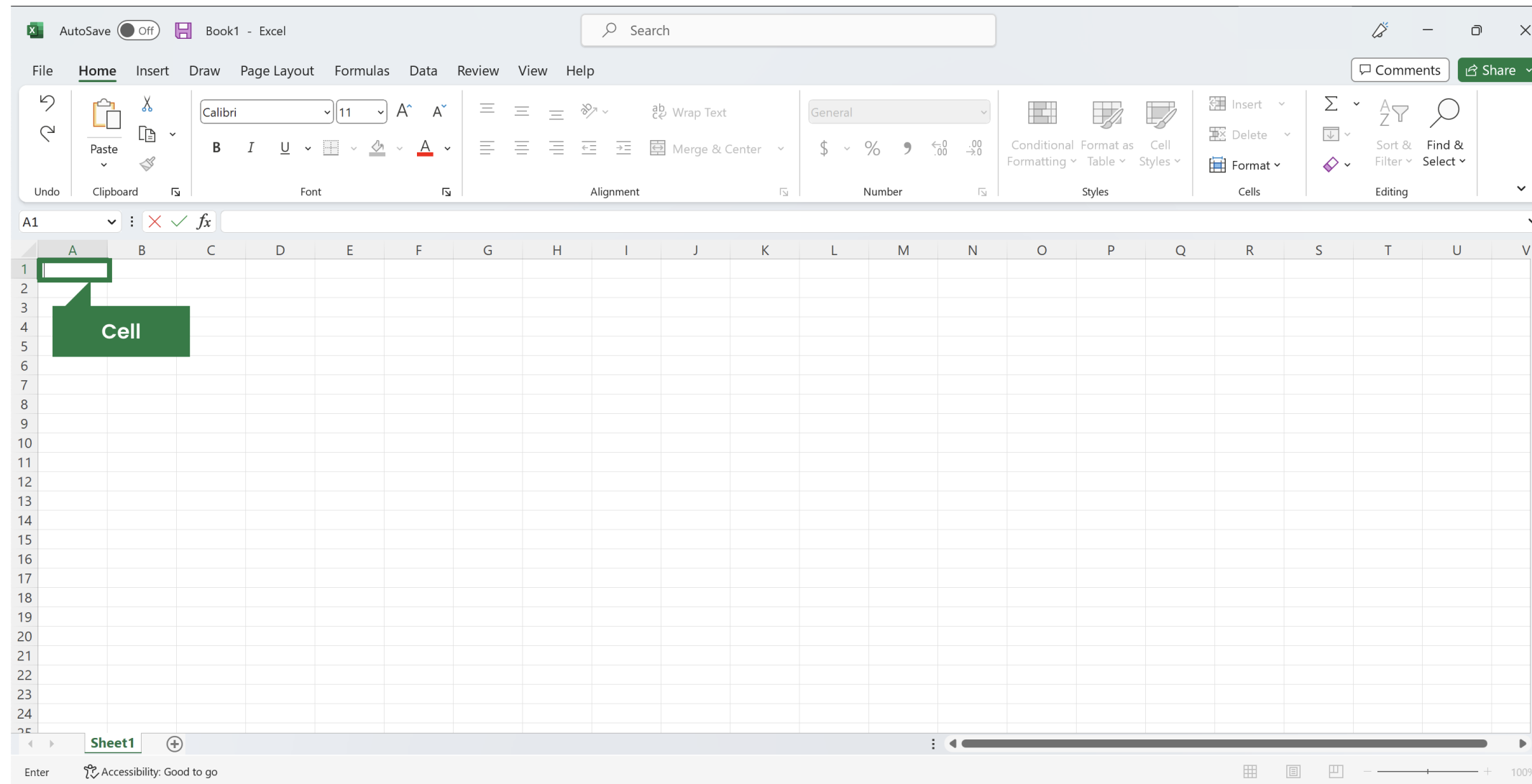
Key definitions

- **Cell reference:** combination of a column letter and row number that identifies a cell in the worksheet
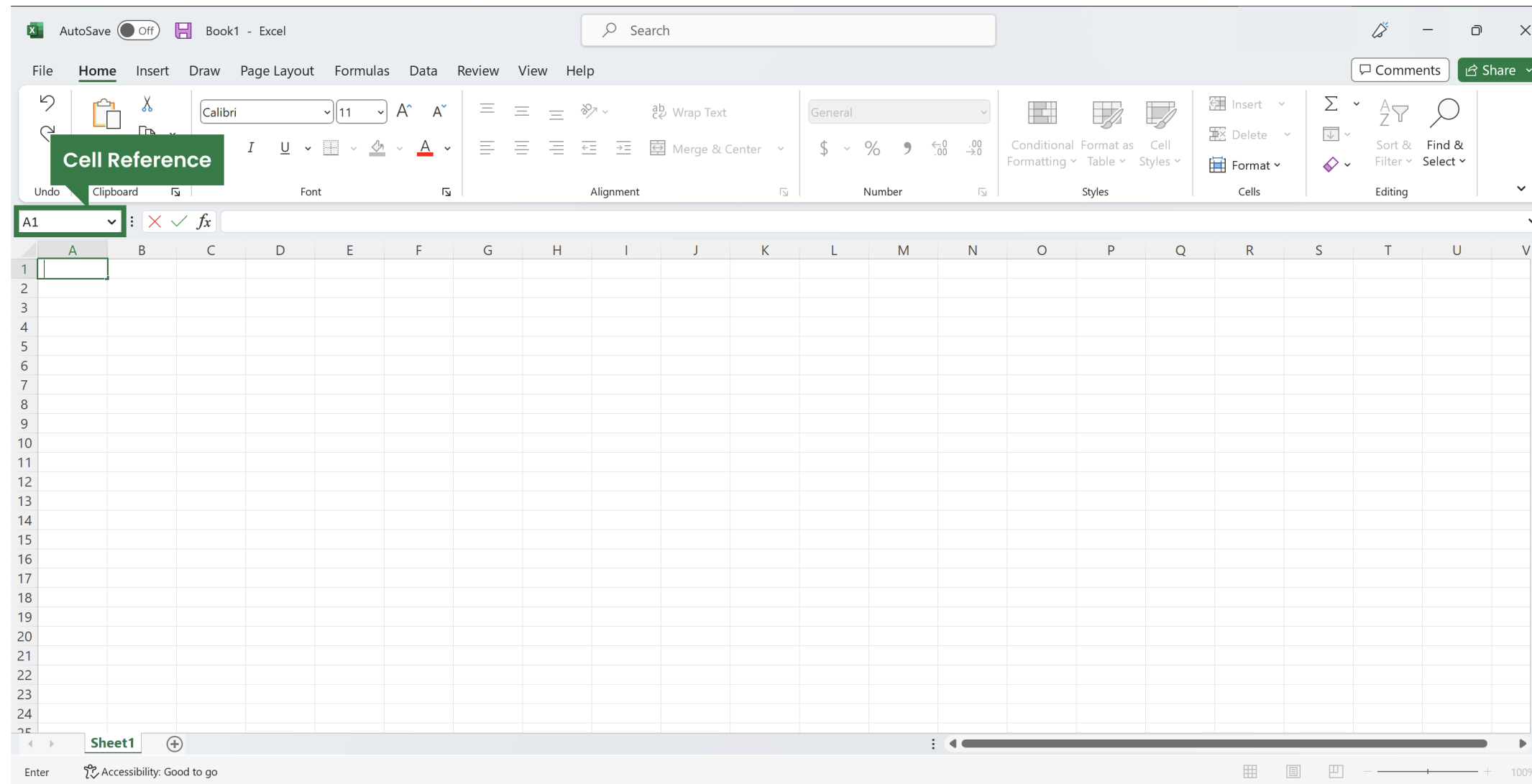
Key definitions

- **Cell reference:** combination of a column letter and row number that identifies a cell in the worksheet
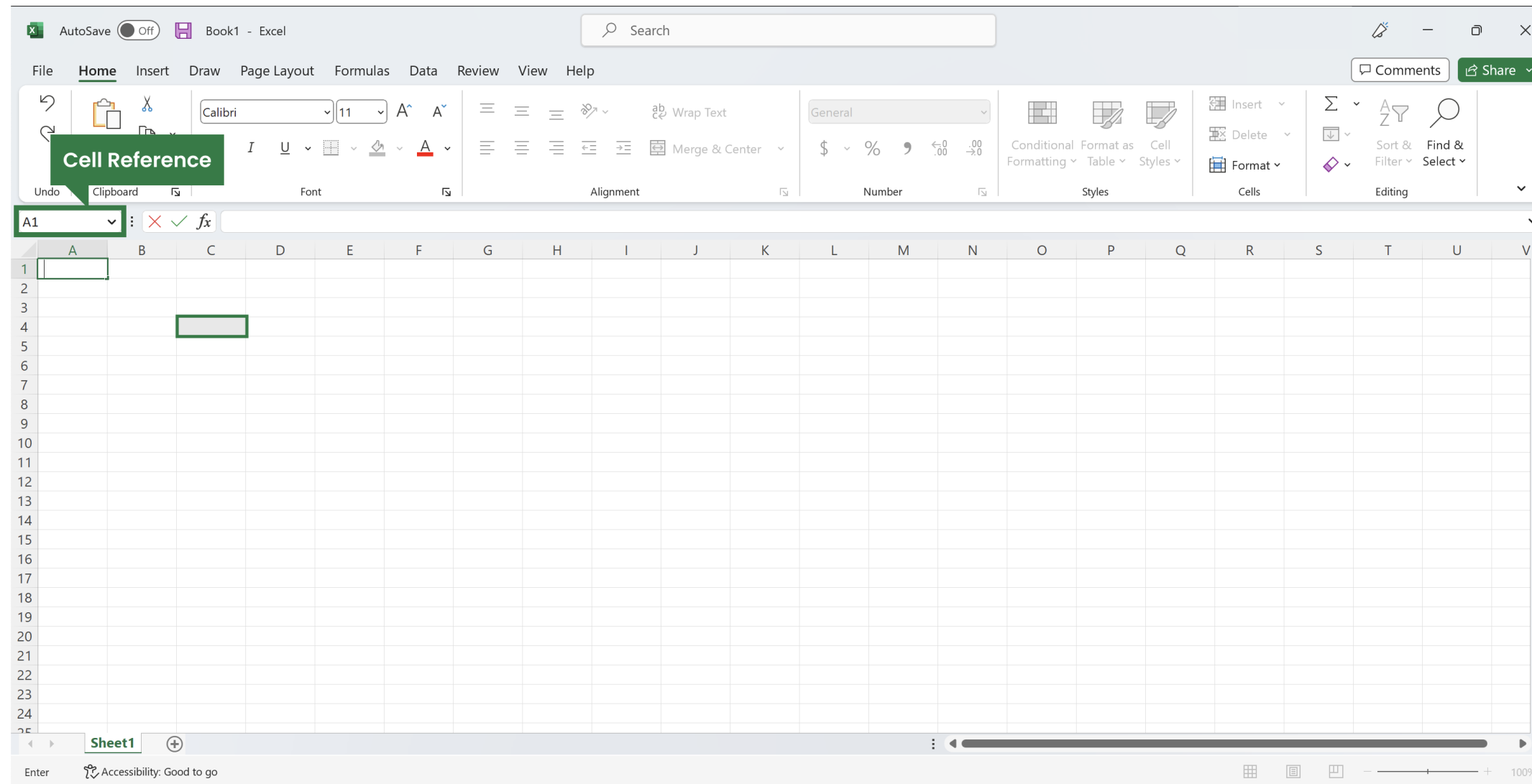
Key definitions

- **Active cell**: refers to the cell that is being worked with, this is identified by a rectangular green box
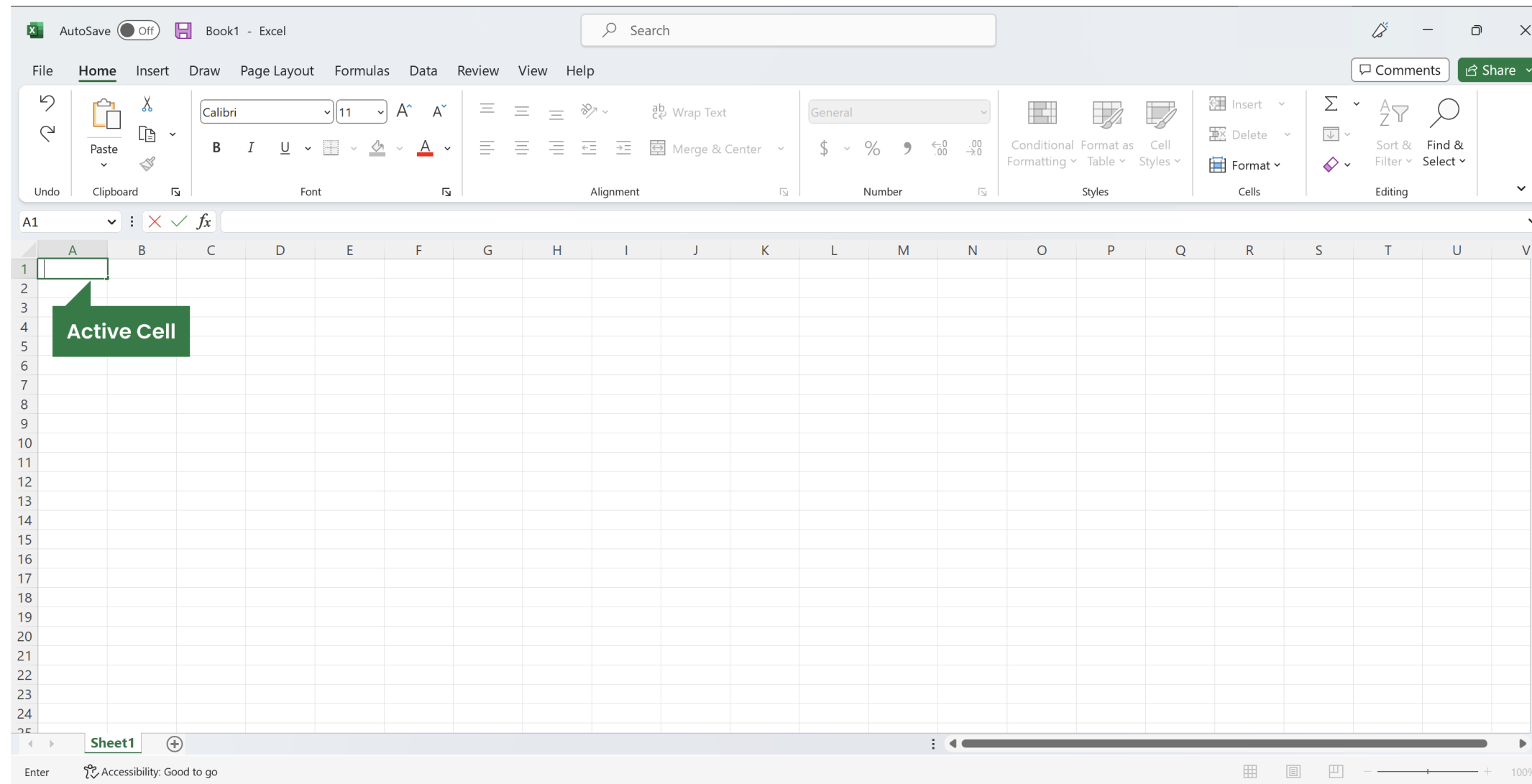
Key definitions

- **Range:** refers to two or more cells in a worksheet, these do not necessarily have to be adjacent
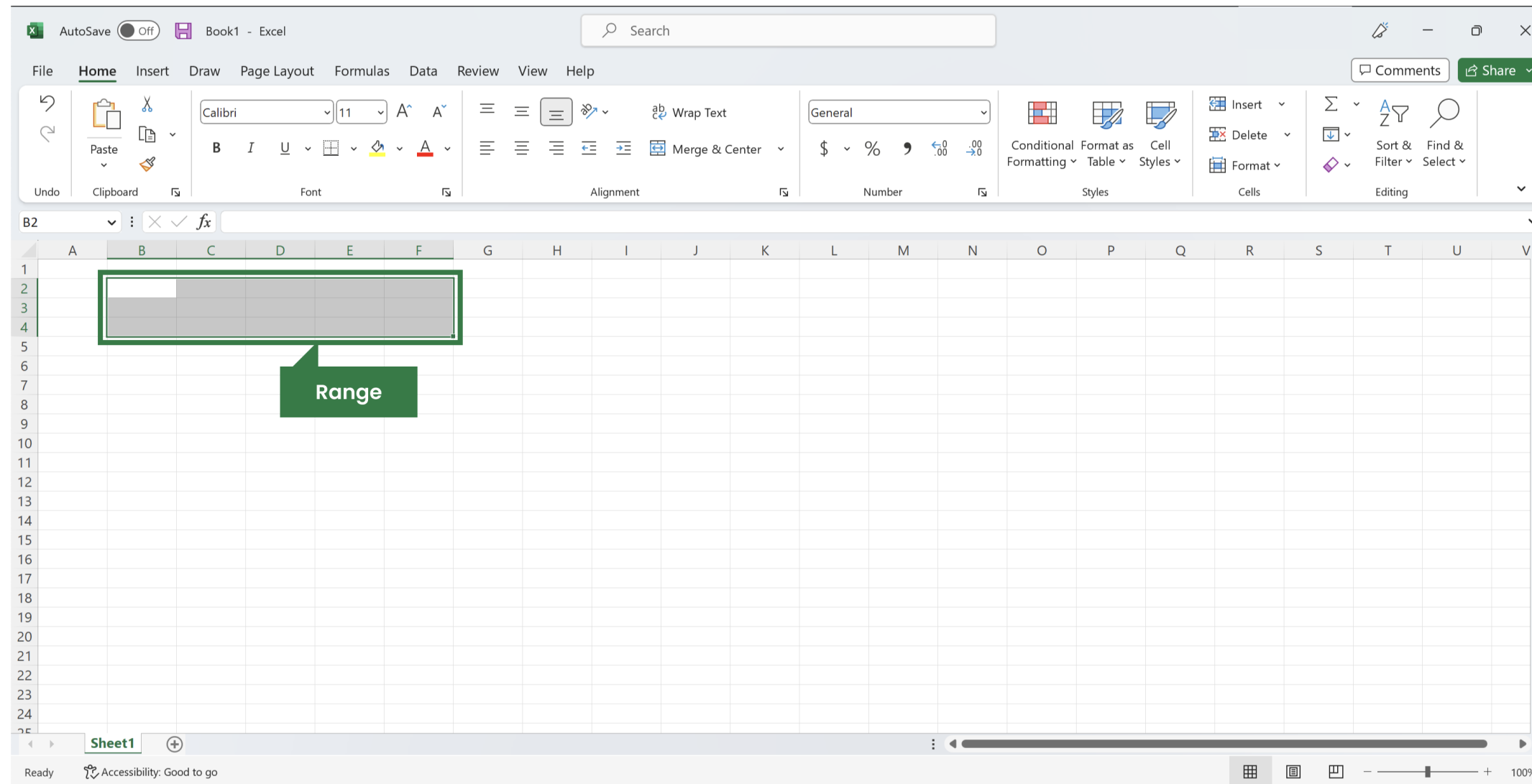
Key definitions

- **Formula**: mathematical equations, cell references, or functions placed within a cell. All formulas must started with an equal = sign
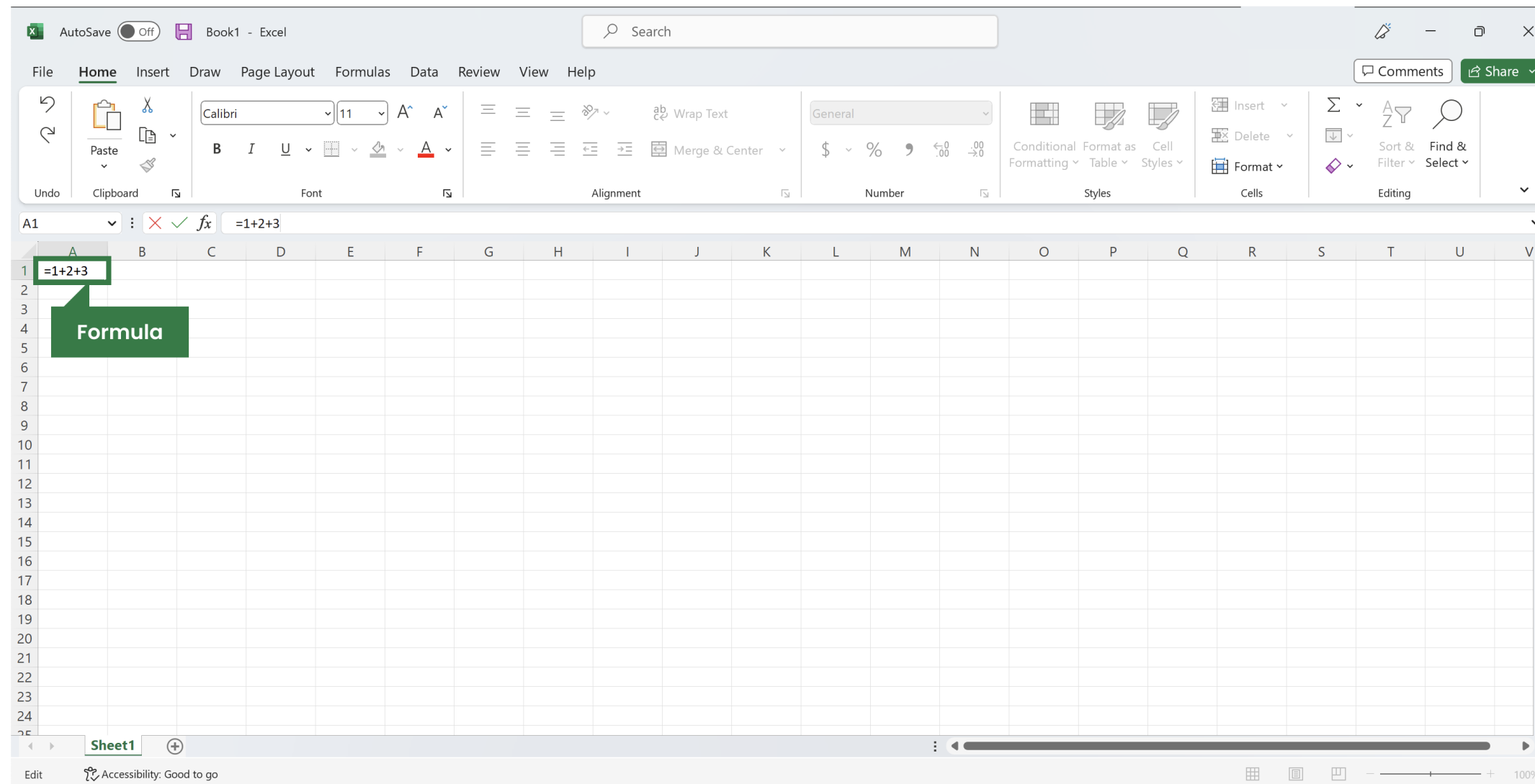
Key definitions

- **Formula bar:** bar located on top of the worksheet next to the f_x label. It's used to enter or edit values/formulas
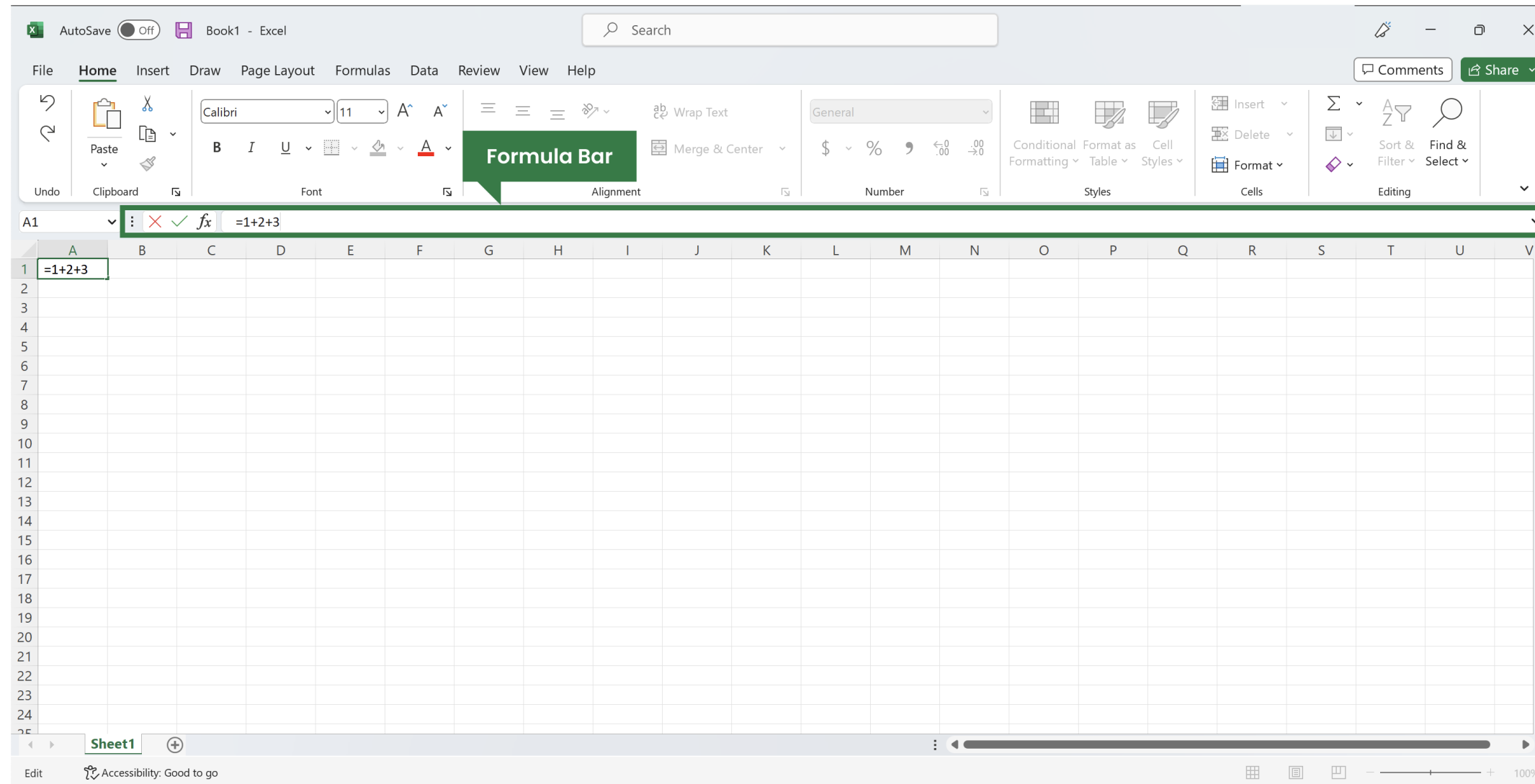
Let's practice!

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Navigating Excel

INTRODUCTION TO EXCEL

Full Name
Instructor

datacamp

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Working with tables

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Jess Ahmet
Curriculum Manager, DataCamp

Tables in Excel

Product	Quarter 1	Quarter 2
Dairy Milk	$744.6	$172.9
Galaxy	$5,079.6	$1,249.1
Hersheys	$943.9	$4,529.1
Total	$6,768.1	$5,951.1

Column header row - First row in a table that contains column headings

Body - Where all the rows of data and formulas live that relate to our columns

Totals - Off by default, but can be enabled to summarize all rows in a table

Benefits of using tables

Structured references

- Easy to read and understand

- Reference columns by name in table

- Dynamic and automatically updates as data is added or removed

Data integrity

- Built-in data validation features

- Apply rules to columns for certain data types

Formatting your data

Tables

- Re-size table

- Apply slicers

- Create pivot tables

- Apply style options and style designs

Cells

- Customize fonts, alignment, data types

- Apply conditional formatting

- Apply cell styles and cell themes

Filtering and sorting data

Filtering

- Hides data you do not currently want to analyze

- Built-in comparison operations like greater than or top N

Sorting

- Integral part of data analysis

- Helps you quickly visualize and understand your data better

- Easier to find data when you know what you're looking for

- Sort by text, numbers, dates, and times

- Sort by formatting: cell color, font color, and icons

Adventure Works

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	OrderNo	SalesOrderLineKey	OrderQuantity	ItemCost	ItemPrice	OrderDate	DeliveryDueDate	CustomerName	CustomerCity	CustomerState	CustomerCountry	ProductCategory	ProductSubcategory	Product	ProductColor	Model
2	SO43697	43697001	1	2,171.29	3,578.27	7/1/2017	7/11/2017	Cole Watson	Metchosin	British Columbia	Canada	Bikes	Road Bikes	Road-150 Re	Red	Road-150
3	SO43698	43698001	1	1,912.15	3,399.99	7/1/2017	7/11/2017	Rachael Martinez	Pantin	Seine Saint Denis	France	Bikes	Mountain Bikes	Mountain-10	Silver	Mountain-100
4	SO43699	43699001	1	1,912.15	3,399.99	7/1/2017	7/11/2017	Sydney Wright	Lebanon	Oregon	United States	Bikes	Mountain Bikes	Mountain-10	Silver	Mountain-100
5	SO43700	43700001	1	413.15	699.1	7/1/2017	7/11/2017	Ruben Prasad	Beverly Hills	California	United States	Bikes	Road Bikes	Road-650 Bla	Black	Road-650
6	SO43701	43701001	1	1,912.15	3,399.99	7/1/2017	7/11/2017	Christy Zhu	North Ryde	New South Wales	Australia	Bikes	Mountain Bikes	Mountain-10	Silver	Mountain-100
7	SO43702	43702001	1	2,171.29	3,578.27	7/1/2017	7/11/2017	Colin Anand		California	United States	Bikes	Road Bikes	Road-150 Re	Red	Road-150
8	SO43703	43703001	1	2,171.29	3,578.27	7/1/2017	7/11/2017	Albert Alvarez	Perth	South Australia	Australia	Bikes	Road Bikes	Road-150 Re	Red	Road-150
9	SO43704	43704001	1	1,898.09	3,374.99	7/1/2017	7/11/2017	Julio Ruiz	East Brisbane	Queensland	Australia	Bikes	Mountain Bikes	Mountain-10	Black	Mountain-100
10	SO43705	43705001	1	1,912.15	3,399.99	7/1/2017	7/11/2017	Curtis Lu	East Brisbane	Queensland	Australia	Bikes	Mountain Bikes	Mountain-10	Silver	Mountain-100
11	SO43706	43706001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Edward Brown	Santa Monica	California	United States	Bikes	Road Bikes	Road-150 Re	Red	Road-150
12	SO43707	43707001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Emma Brown	Lemon Grove	California	United States	Bikes	Road Bikes	Road-150 Re	Red	Road-150
13	SO43708	43708001	1	413.15	699.1	7/2/2017	7/12/2017	Brad Deng	Liverpool	England	United Kingdom	Bikes	Road Bikes	Road-650 Re	Red	Road-650
14	SO43709	43709001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Martha Xu	Rockhampton	Queensland	Australia	Bikes	Road Bikes	Road-150 Re	Red	Road-150
15	SO43710	43710001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Katrina Raji	Wollongong	New South Wales	Australia	Bikes	Road Bikes	Road-150 Re	Red	Road-150
16	SO43711	43711001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Courtney Edwards	Milwaukie	Oregon	United States	Bikes	Road Bikes	Road-150 Re	Red	Road-150
17	SO43712	43712001	1	2,171.29	3,578.27	7/2/2017	7/12/2017	Abigail Henderson	Werne	Nordrhein-Westfal	Germany	Bikes	Road Bikes	Road-150 Re	Red	Road-150
18	SO43713	43713001	1	2,171.29	3,578.27	7/3/2017	7/13/2017	Sydney Rogers	Burbank	California	United States	Bikes	Road Bikes	Road-150 Re	Red	Road-150
19	SO43714	43714001	1	2,171.29	3,578.27	7/3/2017	7/13/2017	Latasha Alonso	York	England	United Kingdom	Bikes	Road Bikes	Road-150 Re	Red	Road-150
20	SO43715	43715001	1	2,171.29	3,578.27	7/3/2017	7/13/2017	Warren Jai	Melbourne	Victoria	Australia	Bikes	Road Bikes	Road-150 Re	Red	Road-150
21	SO43716	43716001	1	2,171.29	3,578.27	7/3/2017	7/13/2017	Jonathon Gutierrez	Goulburn	New South Wales	Australia	Bikes	Road Bikes	Road-150 Re	Red	Road-150

Adventure Works

Column Name	Details
OrderNo	ID to identify each order
ItemCost	The cost each item costs to make
ItemPrice	The price each item sells for
OrderQuantity	The number of items ordered
OrderDate	The date the customer made the order
DeliveryDueDate	The date the customer received the order
Product	The item that was ordered
CustomerName	The customers name

Let's practice!

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Managing data with tables

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