

Data sources and access

Importing and exporting data in Sheets

Importing data from files

Importing is the process of **transferring data from an existing file** into Google Sheets. This way, we do not have to manually input already available data.

Why import data?

- View or inspect the data.
- Manipulate or analyse the data in various ways.
- Supplement data with what is already available.
- Export the data in a different format.

We can import data from the following file formats:

- Microsoft Excel formats (**.xls**, **.xlsx**, **.xlsm**, **.xlt**, **.xltx**)
- Comma Separated Values (**.csv**)
- Tab Separated Values (**.tsv**)
- Text files (**.txt**)
- OpenOffice/LibreOffice (**.ods**)
- MapInfo (**.tab**)

Import options

Depending on the file format we are trying to import, we will have all or some of the following import options:

Create new spreadsheet:

Use the imported data to create a new spreadsheet file (workbook) in a different browser tab.

Replace current sheet:

Replace only the current sheet with the data from the imported file.

Insert new sheet(s):

Add a new sheet with the imported data in the current workbook.

Append to current sheet:

Add the imported data to the current sheet, starting from the first empty row.

Replace spreadsheet:

Replace all data in the current workbook with the data from the imported file.

Replace data at selected cell:

Replace data at the selected cell in the current sheet with the imported data.

Choosing a separator

This step is only necessary if we are **importing a plain text file**, i.e., a .csv, .tsv, or .txt. Here, we will be required to choose a separator character that will be used as the delimiter for our data.



Tab

A tab separator will be used.



Comma

A comma separator will be used.



Detect

The separator will be determined automatically based on the data.



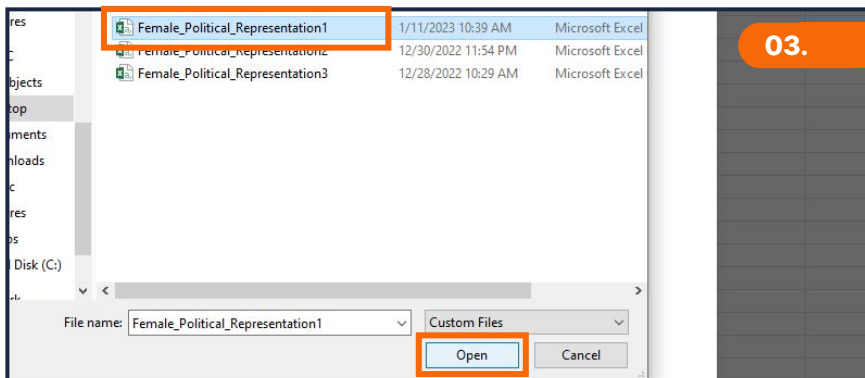
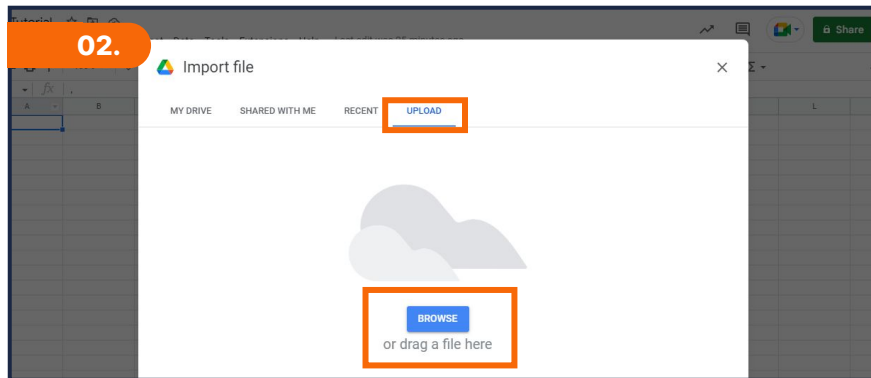
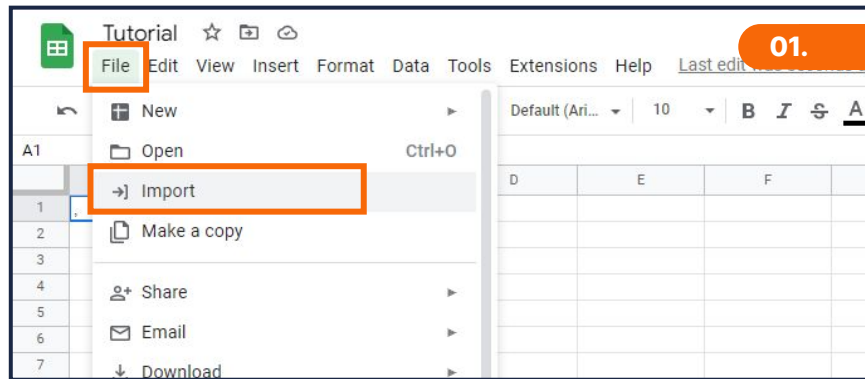
Custom

A custom separator of choice will be used.

Steps for importing a dataset

From a local machine:

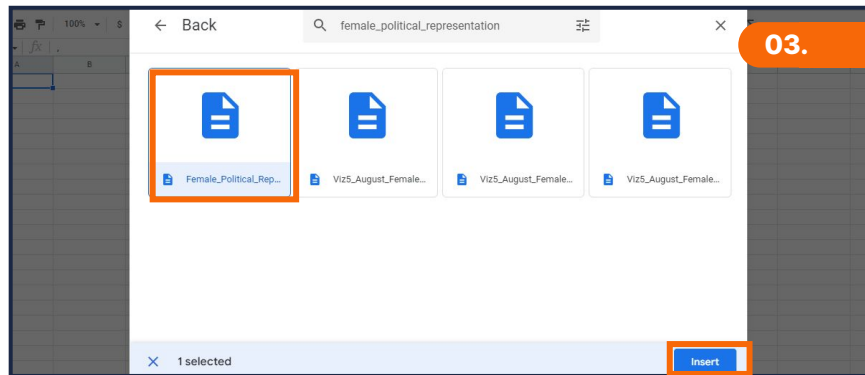
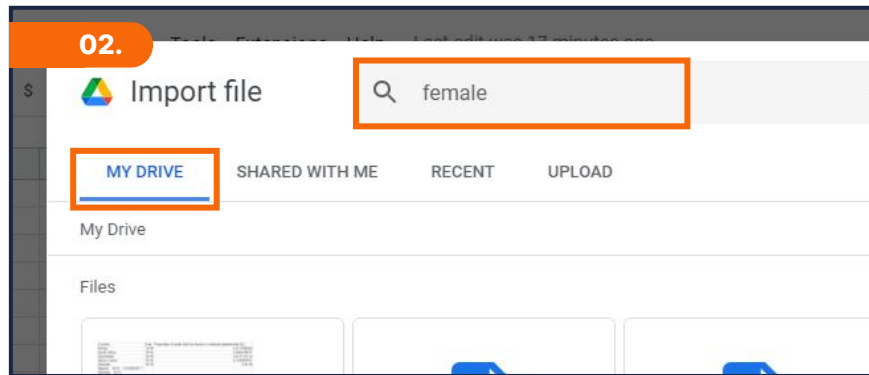
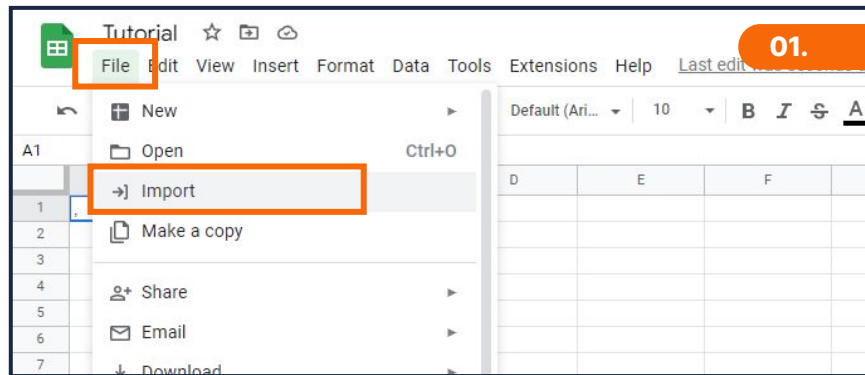
- 01.** On the Google Sheets interface, click **File** > **Import**.
- 02.** Click on **Upload** > **drag and drop** the file.
- 03.** Or **Browse** for the file on your device > select the file > click **Open**.



Steps for importing a dataset

From Google Drive:

- 01.** On the Google Sheets interface, click **File** > **Import**.
- 02.** Click **My Drive** > search for the file in the drive.
- 03.** Select the file > click **Insert**.



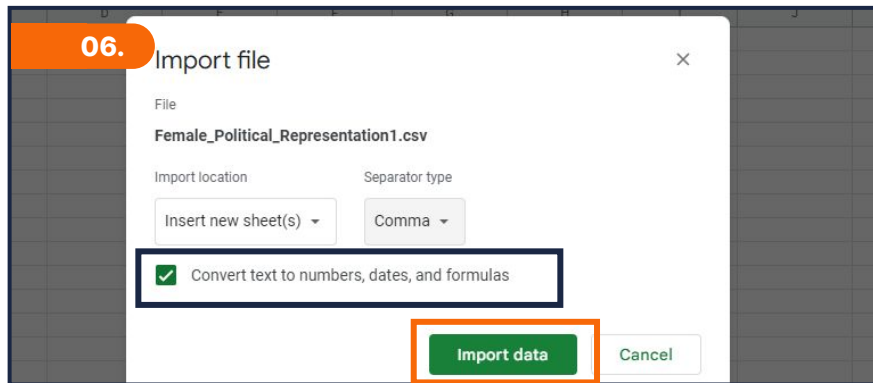
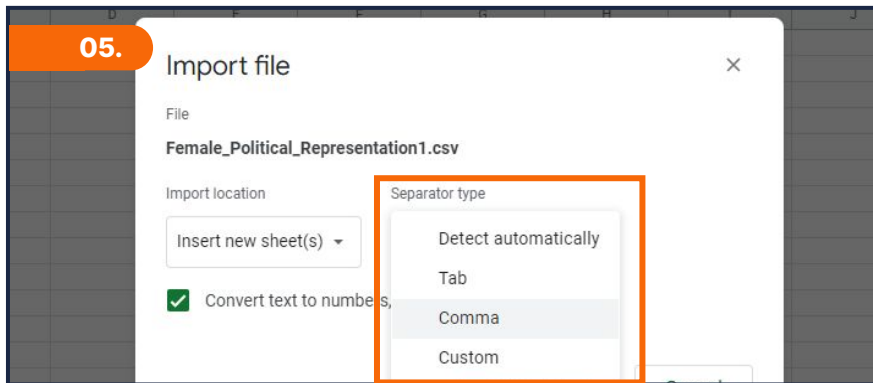
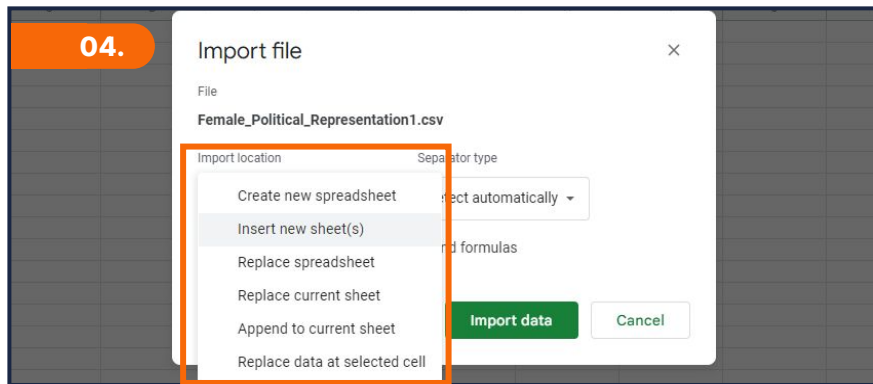
Steps for importing a dataset

04. Select the preferred **import location** option.

05. Pick a suitable **separator type**.

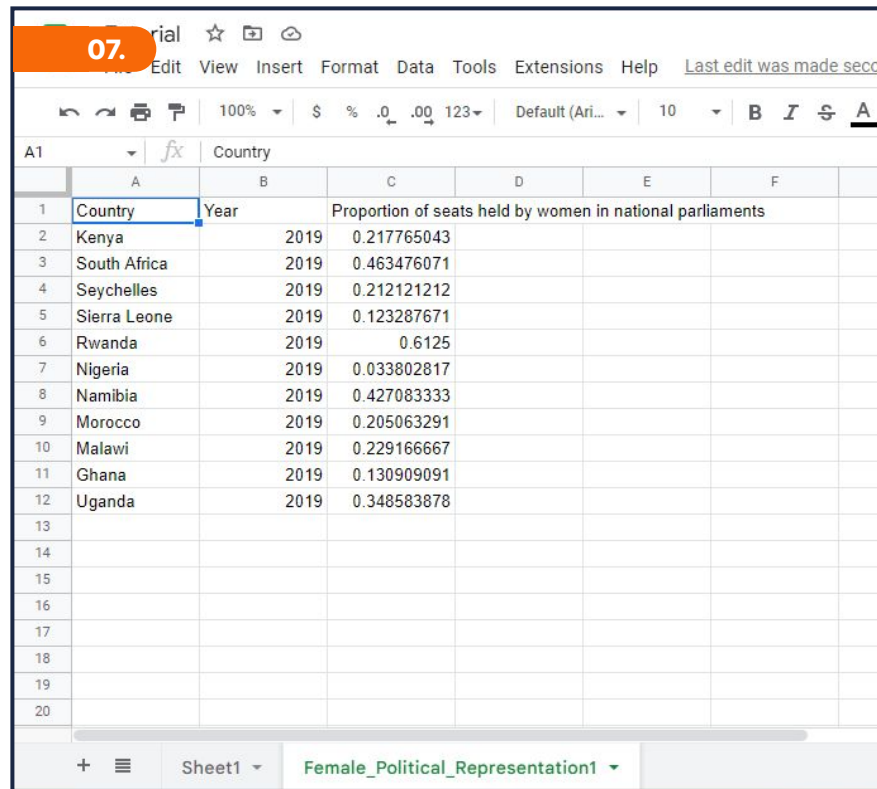
06. Click on **Import data**.

Note: When the checkbox is ticked, text data in recognisable formats are automatically converted into numerical values, date values, or formulas.



Steps for importing a dataset

07. Our file is now imported and the data will appear on the Sheet.



The screenshot shows a Google Sheets interface with a dataset imported. The spreadsheet has columns for Country, Year, and Proportion of seats held by women in national parliaments. The data is organized into rows, with the first row serving as a header. The 'Country' column is highlighted in blue. The 'Year' column contains the value 2019 for all entries. The 'Proportion of seats held by women in national parliaments' column contains decimal values ranging from 0.033802817 to 0.6125. The spreadsheet is titled 'Female_Political_Representation1' and is on 'Sheet1'.

| | A | B | C | D | E | F |
|----|--------------|------|---|---|---|---|
| 1 | Country | Year | Proportion of seats held by women in national parliaments | | | |
| 2 | Kenya | 2019 | 0.217765043 | | | |
| 3 | South Africa | 2019 | 0.463476071 | | | |
| 4 | Seychelles | 2019 | 0.212121212 | | | |
| 5 | Sierra Leone | 2019 | 0.123287671 | | | |
| 6 | Rwanda | 2019 | 0.6125 | | | |
| 7 | Nigeria | 2019 | 0.033802817 | | | |
| 8 | Namibia | 2019 | 0.427083333 | | | |
| 9 | Morocco | 2019 | 0.205063291 | | | |
| 10 | Malawi | 2019 | 0.229166667 | | | |
| 11 | Ghana | 2019 | 0.130909091 | | | |
| 12 | Uganda | 2019 | 0.348583878 | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |

Exporting data from Google Sheets

Exporting is the process of **downloading data from Google Sheets** into a different file format.

Why export data?

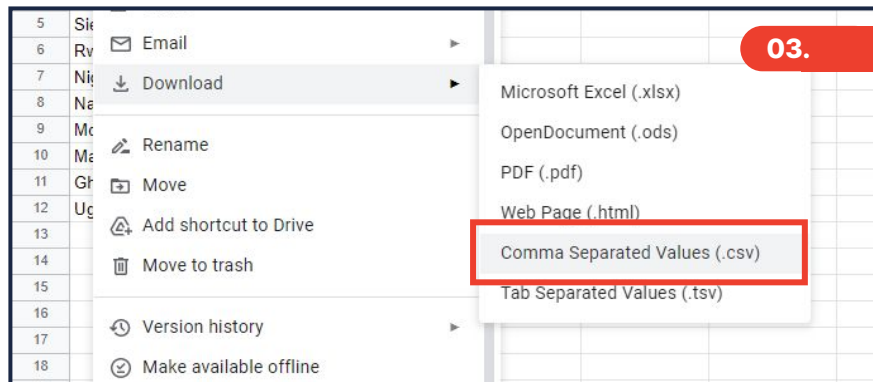
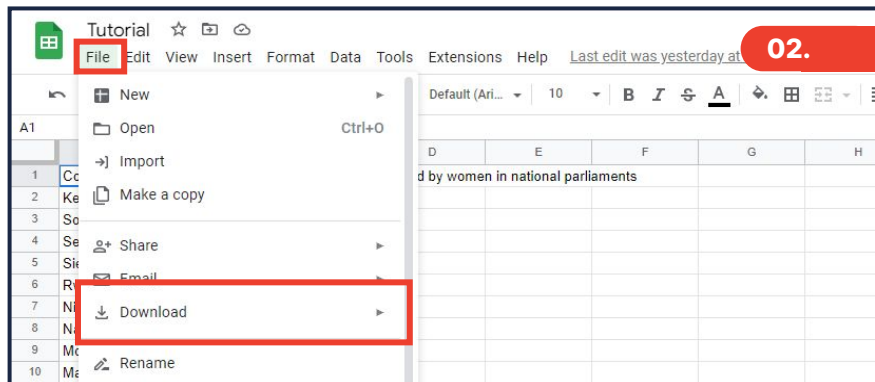
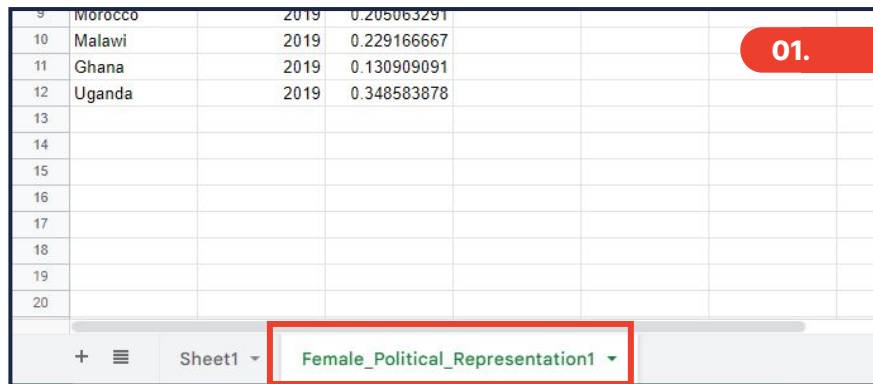
- Open and edit data in other programs.
- Store data in a particular file format.
- Share data with others.

We can export data into the following formats:

- Microsoft Excel (.xlsx)
- OpenDocument (.ods)
- Comma Separated Values (.csv)
- Tab Separated Values (.tsv)
- PDF (.pdf)
- Web page (.html)

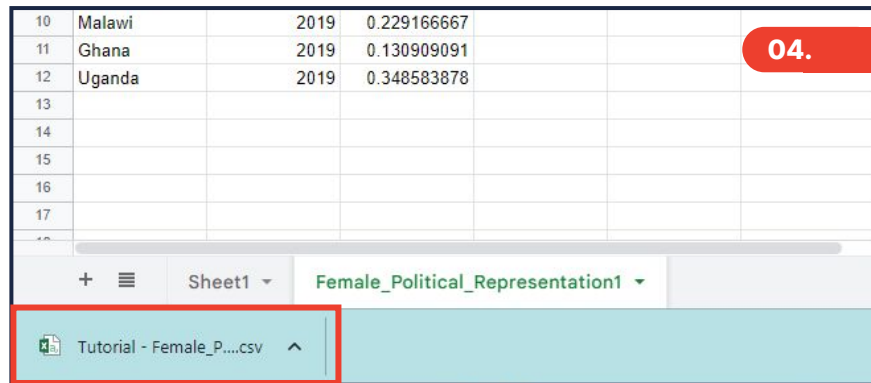
Steps for exporting data to a CSV

- 01.** On the workbook, click on the **worksheet tab** with the data that need to be exported as a CSV.
- 02.** Go to **File > Download**.
- 03.** Select **Comma Separated Values (.csv)**.



Steps for exporting data to a CSV

04. The file will be **downloaded** onto the local machine > check the default **Downloads** folder.



| | | | | | | |
|----|--------|------|-------------|--|--|--|
| 10 | Malawi | 2019 | 0.229166667 | | | |
| 11 | Ghana | 2019 | 0.130909091 | | | |
| 12 | Uganda | 2019 | 0.348583878 | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |

Sheet1 Female_Political_Representation1

Tutorial - Female_P....csv

Things to note when exporting to a CSV:

- **Only one tab** can be exported at a time. CSV does not support multiple tab exports.
- **Additional information** such as formatting, visualisations, functions, etc. will be **lost**.
- Data will be exported with **comma separators** by default.