Parametrise your report

Instructions

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2026-03-06

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This exercise builds on the previous exercises where you learnt to create a simple MS Word report and to add dynamic elements to your report . Mastering these two exercises is essential for successfully completing the current exercise.

1 Objectives

- If you have generated the MS Word report with dynamic elements as instructed in Exercise 4, continue working on the same Quarto notebook you already modified. Otherwise, download the files `df1.RData`, `df2.RData`, `exercise5.qmd`, `swisstph_template.docx`, and `my_biblio.bib` using the links provided on the right-hand side of this page. For simplicity, please put these two files under the same folder and open the Quarto notebook in RStudio.
- Complete each of the following tasks and render the document after each task or set of tasks to track your progress.

2 Use Quarto in a terminal

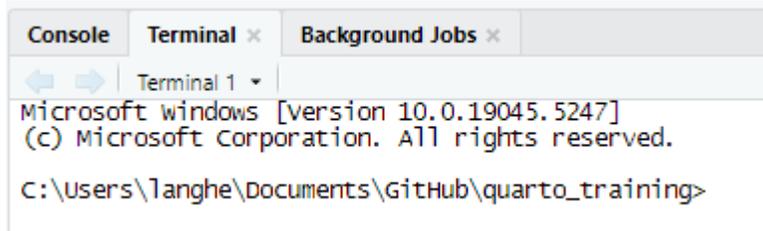☐ Render your MS Word report using the RStudio Terminal;

```
quarto render exercise5.qmd
```

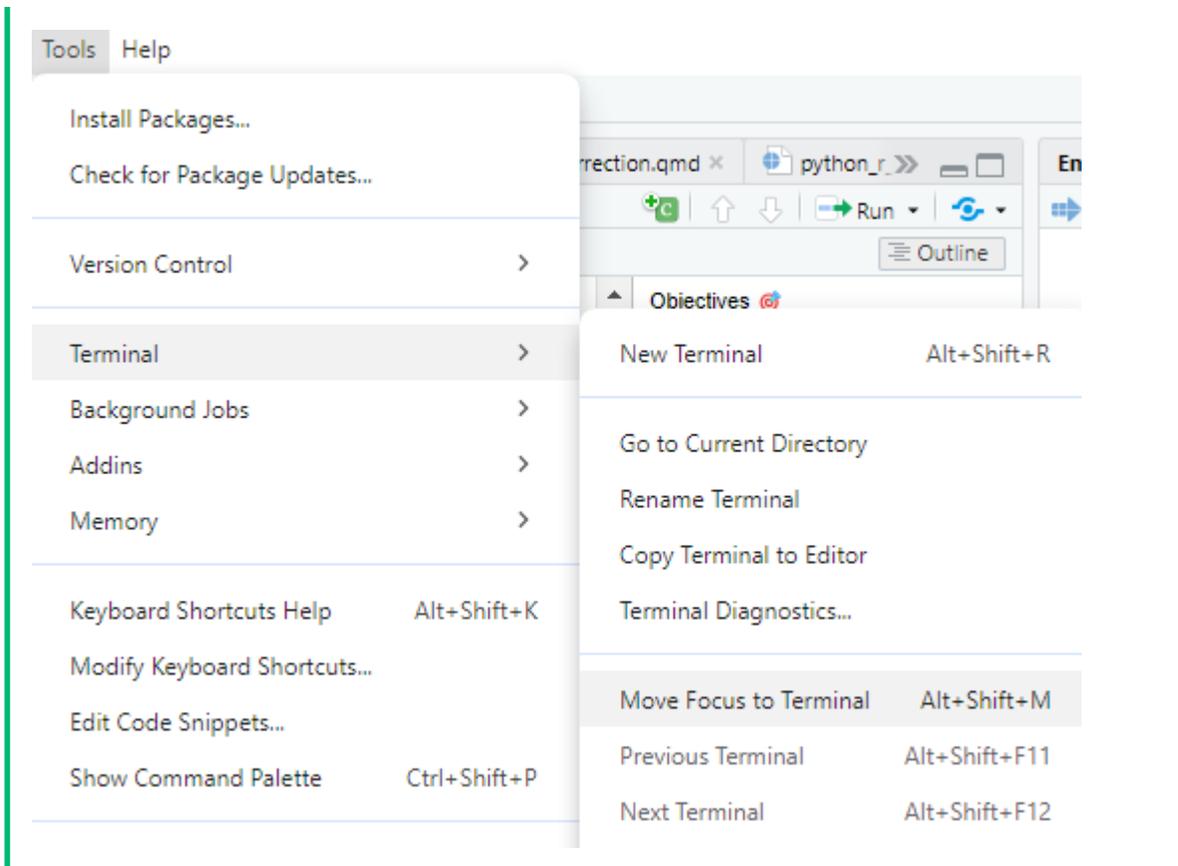☐ Change the output filename when rendering the report;

```
quarto render exercise5.qmd -o exercise5_report1.docx
```

> 💡 Tip
>
> - You can access the RStudio terminal in the `Terminal` tab immediately to the right of the `Console` tab:
>
>
>
> - If the terminal tab is not visible, go to **Tools > Terminal > Move Focus to Terminal**

3 Parametrise your report

☐ Adjust the report to focus on data for the year 2022 only ;

☐ You were unfortunately provided with a previous erroneous version of the dataset. Update the report to use the dataset stored in `df2.RData` instead of the one stored in `df1.RData` ;

☐ Render 3 reports (1 report with df2.RData for the full outbreak period, 1 report with df1.RData for year 2021 only, 1 report with df2.RData for year 2021 only) adapting the following command which needs to be run in a terminal (ensure your working directory is the one where your Quarto document is stored and all file paths are correct).

☐ Create a small R script using `purrr::walk()` or a for loop that calls `quarto::quarto_render()` to generate 5 separate reports automatically.

☐ How would you ensure that the report doesn't 'break' if a user inputs a year that does not exist in the data? How would you implement a 'sanity check' code chunk?

```
quarto render exercise5.qmd -o exercise5_report_df1.docx -P dataset:df1.RData
```

> 💡 **Tip**
>
> - See [Quarto documentation about parameters](#)
> - See [Quarto documentation about rendering outputs using different parameters](#)

> ❗ **Discussion question**
>
> Discuss the advantages and disadvantages of using R within Quarto compared to using R scripts.