Module 4 Exercise

Enable version control in RStudio

- Go to **Tools - Global Options - Git/SVN** and click the "Enable version control for RStudio" so that version control is enabled.

Add RStudio SSH Key to GitHub

- While you are on the page, click **Create RSA Key**. You don't need to add a passphrase, just create the key. When it is created, copy the key.
- Then go to your GitHub account, click on your user icon in the top right of the screen, then click **Settings**.
- From there, click **SSH and GPG Keys** and then click on **New SSH key**. Paste the key into the **Key** box — you don't need to add a title. Click on **Add SSH key** to finish adding the RStudio key.

Create a R project with remote version control

- In RStudio, then create a new project with remote version control, setting it up for use with your Github course repository.
  - For the exercise URL, go to your Github account and click on the green "Clone or download button." Ensure you copy the URL for "Clone with SSH".
- Now as make changes on the document below, use version control to routinely update your documents on GitHub.

Create a PDF document with Module 3 Exercise instructions and results

- Using the Module 3 instructions and either your own code or the suggested solutions code to Module 3 exercises, try to create a single PDF document which shows:
  - The instructions for each task, formatted as in the PDF,
  - Your code
  - Each dataframe created (IMDB 250, Top Box Office Movies, and the Combined Dataset) is displayed.
- Make sure the results have the following:
  - Code highlighting with your style of choice
  - A table of contents
  - Dataframes printed as tibbles

Create an HTML copy

Now that you have a PDF copy, try saving a new copy of your RMarkdown file that you will then use to generate the same document as a webpage.

- After saving the new copy, change the output type so that it is a HTML document.
- Choose a theme for your HTML page.

- Change the chunks so that there is code folding. Also check out what happens if you instead set *echo* to FALSE for some chunks.
- Change the dataframe printing to Kable, looking at the dataframe after each step using head() instead of displaying the data frame itself.

Now create a Beamer presentation copy

Once again, save another copy of your work, now for use in generating a Beamer presentation (you can try out other presentation types if you prefer). You need only present questions 1 and 2 in the presentation.

- This time, keep head() in the document but set the chunk options so that no output is displayed, just the code itself.
- Choose a Beamer Theme and Color Theme to apply to your presentation. Check out the RStudio page on how to specify these options here and then choose a theme and color theme from the Theme Matrix.
- Add an image to the last slide of your presentation.