

Tutorial for google colaboratory





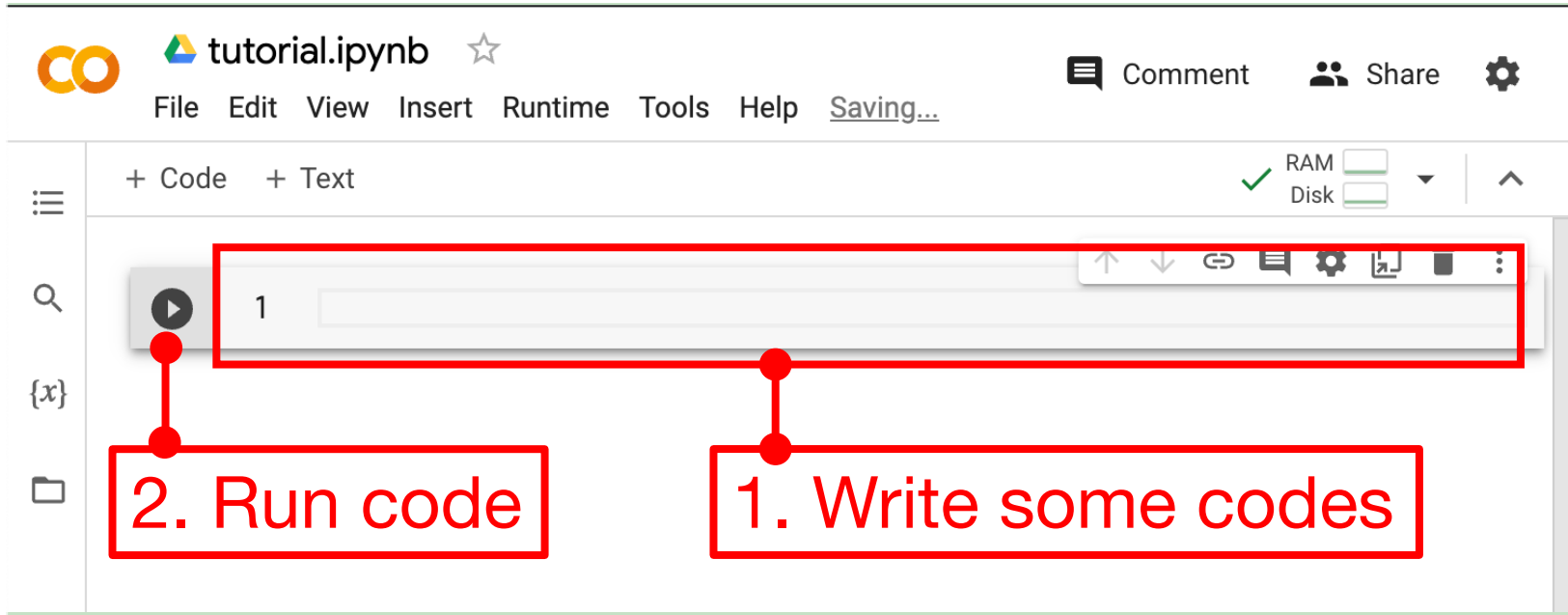
What is Google Colaboratory?

- ◆ **Free Access:** Google Colab is free to use, providing an environment to write and **execute code for Python and R.**
- ◆ **Interactive Coding Environment:** Google Colab provides an interactive environment like Jupyter Notebooks where you can mix **text, code, and outputs all in one document.**
- ◆ **Sharing and Collaboration:** Google Colab is integrated with Google Drive, allowing you to share notebooks with other users and collaborate on work.

How to use Google Colaboratory for Python



Running codes



tutorial.ipynb ☆

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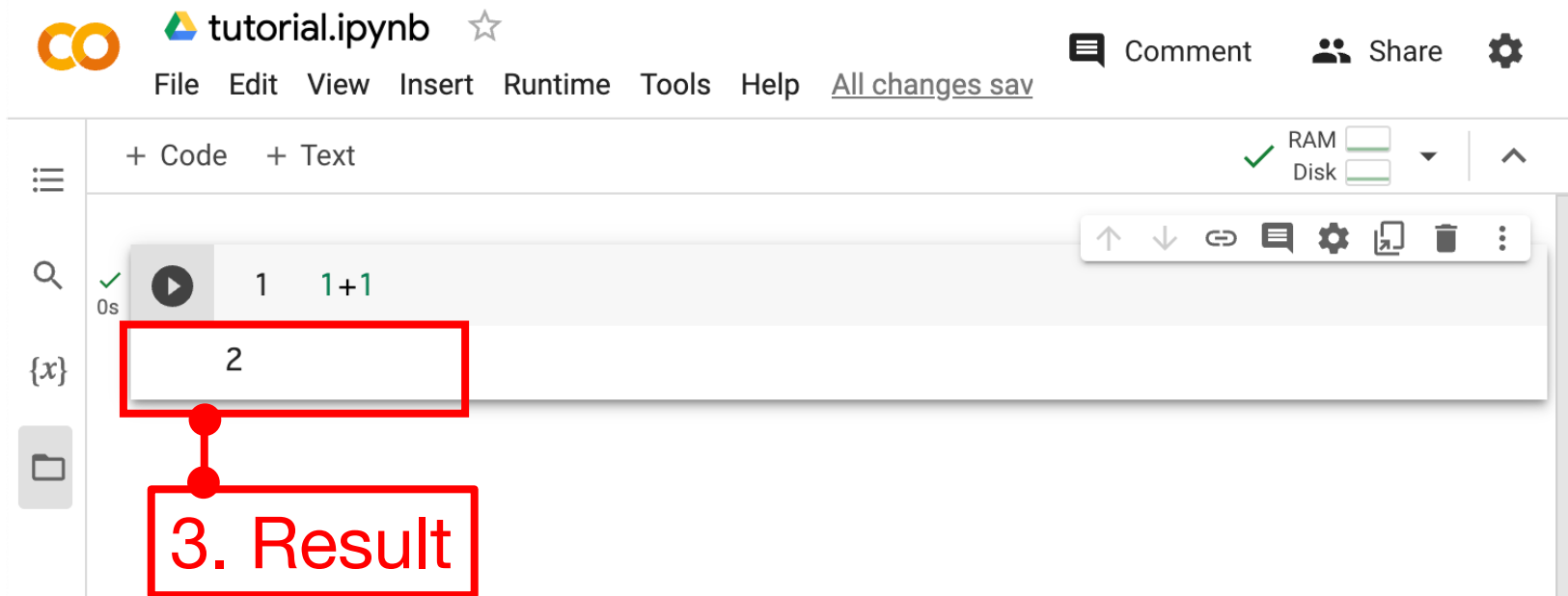
+ Code + Text

RAM ☐ Disk ☐

1

1. Write some codes

2. Run code



tutorial.ipynb ☆

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

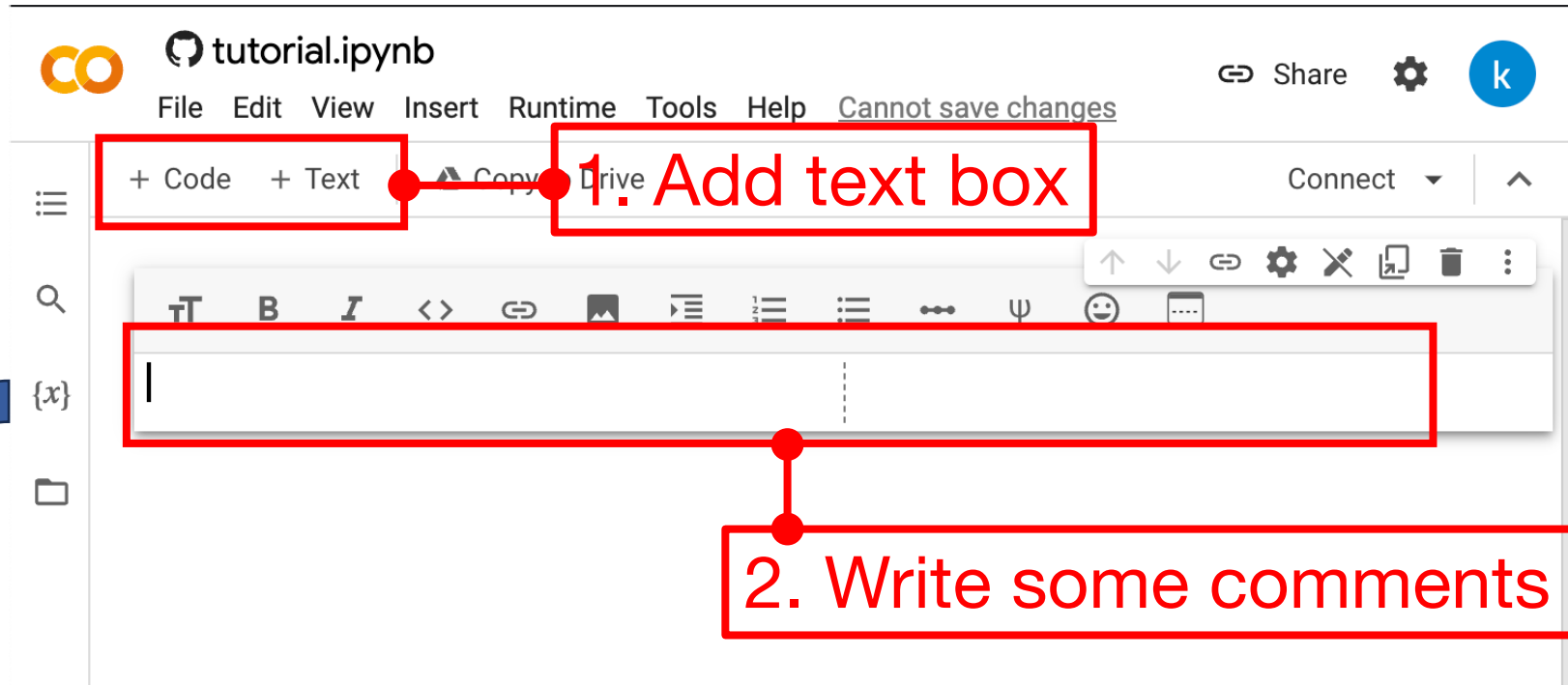
RAM ☐ Disk ☐

✓ 0s 1 1+1

2

3. Result

Writing note



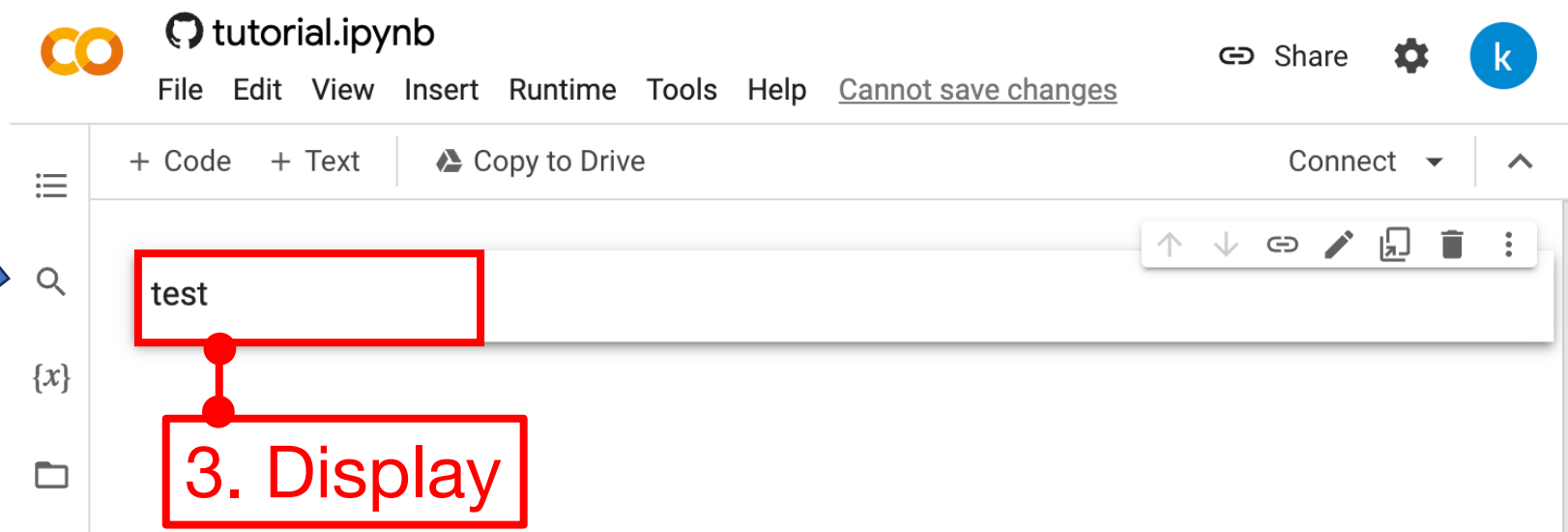
tutorial.ipynb

File Edit View Insert Runtime Tools Help Cannot save changes

+ Code + Text Copy to Drive

1. Add text box

2. Write some comments



tutorial.ipynb

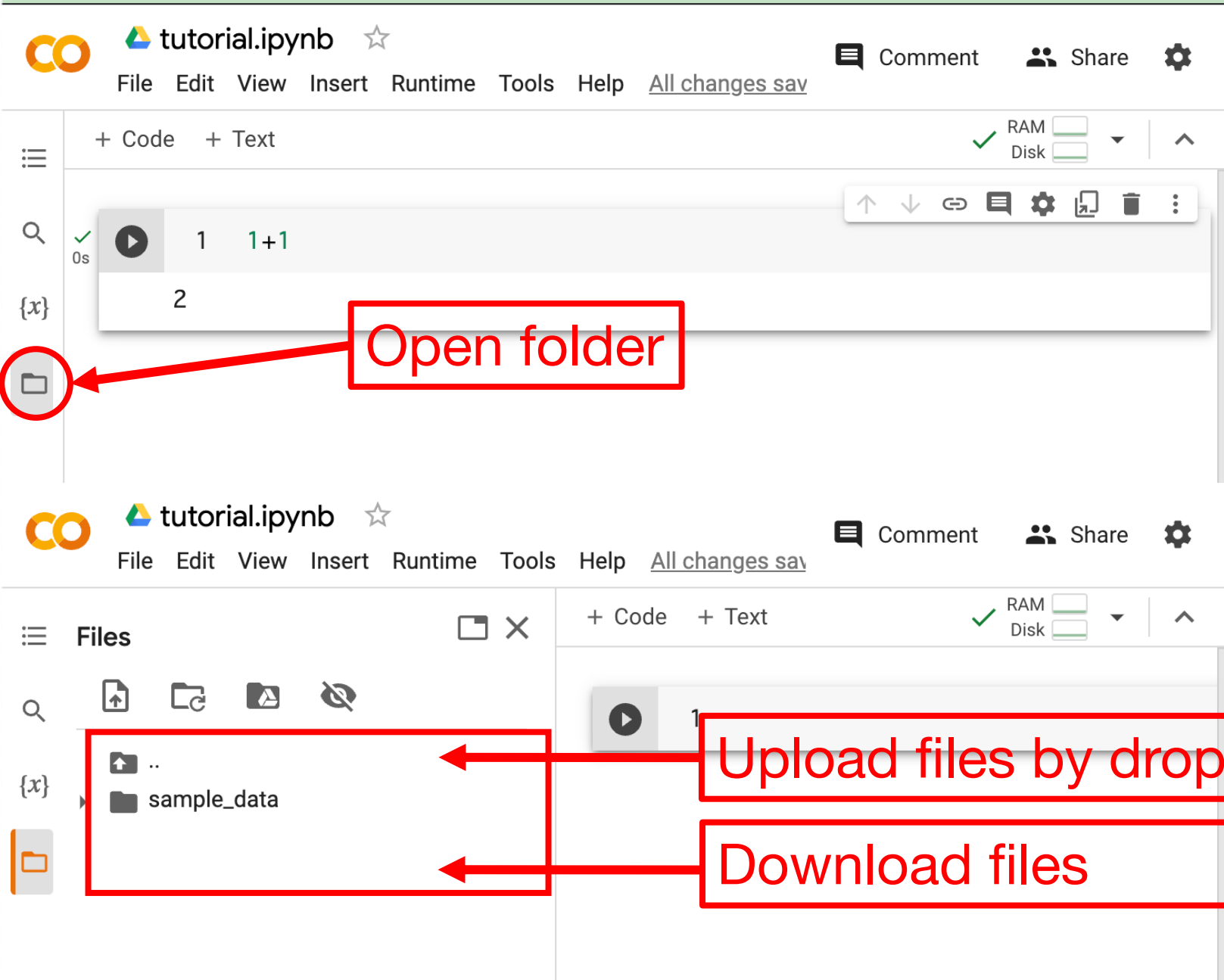
File Edit View Insert Runtime Tools Help Cannot save changes

+ Code + Text Copy to Drive

test

3. Display

Uploading and downloading files





The image shows two screenshots of the JupyterLab interface. The top screenshot shows the main workspace with a code editor containing the text `1 1+1` and the output `2`. A red box labeled "Open folder" points to the folder icon in the left sidebar. The bottom screenshot shows the "Files" panel on the left, which displays a file explorer view with a folder named `sample_data`. A red box labeled "Upload files by drop-and-dragging" points to the upload icon (a square with an upward arrow) in the Files panel. Another red box labeled "Download files" points to the download icon (a square with a downward arrow) in the Files panel. A large blue curved arrow points from the folder icon in the top screenshot to the folder icon in the bottom screenshot.

tutorial.ipynb ☆

File Edit View Insert Runtime Tools Help [All changes saved](#)

+ Code + Text

RAM  Disk 

1 1+1



2

Open folder

tutorial.ipynb ☆

File Edit View Insert Runtime Tools Help [All changes saved](#)

+ Code + Text

RAM  Disk 

Files

..

sample_data

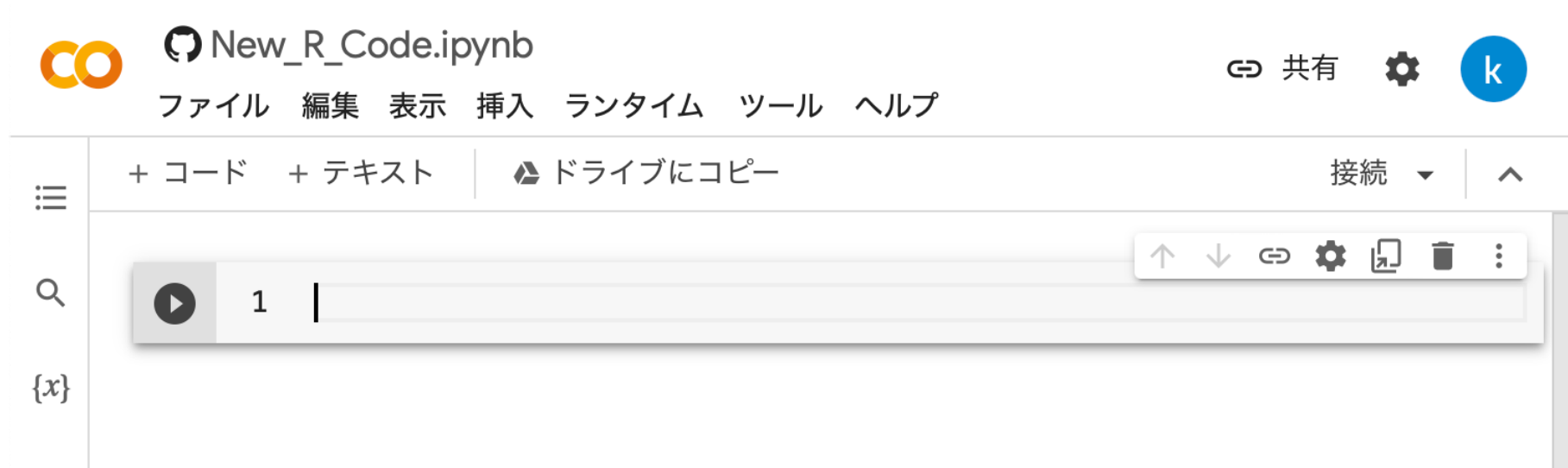
Upload files by drop-and-dragging

Download files

How to use Google Colaboratory for R



Running code



- ◇ The use of notebook is the same as python.
- ◇ Setting up environment R is needed. We will distribute the R environment via following links:
https://github.com/kento-koyama/bayesian_predictive_micro_ICPMF12/blob/main/Extra_templates/New_R_Code.ipynb