

# Tutorial for google colaboratory

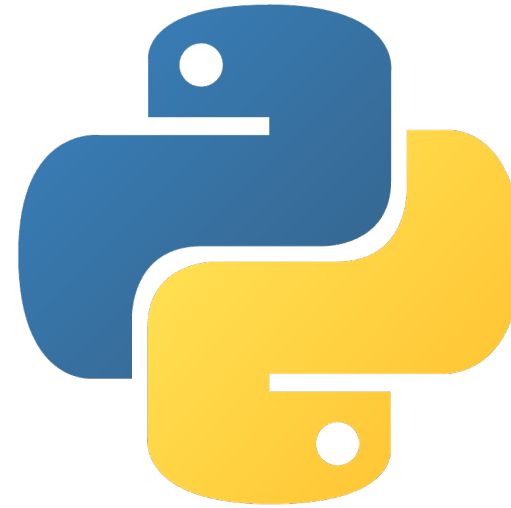




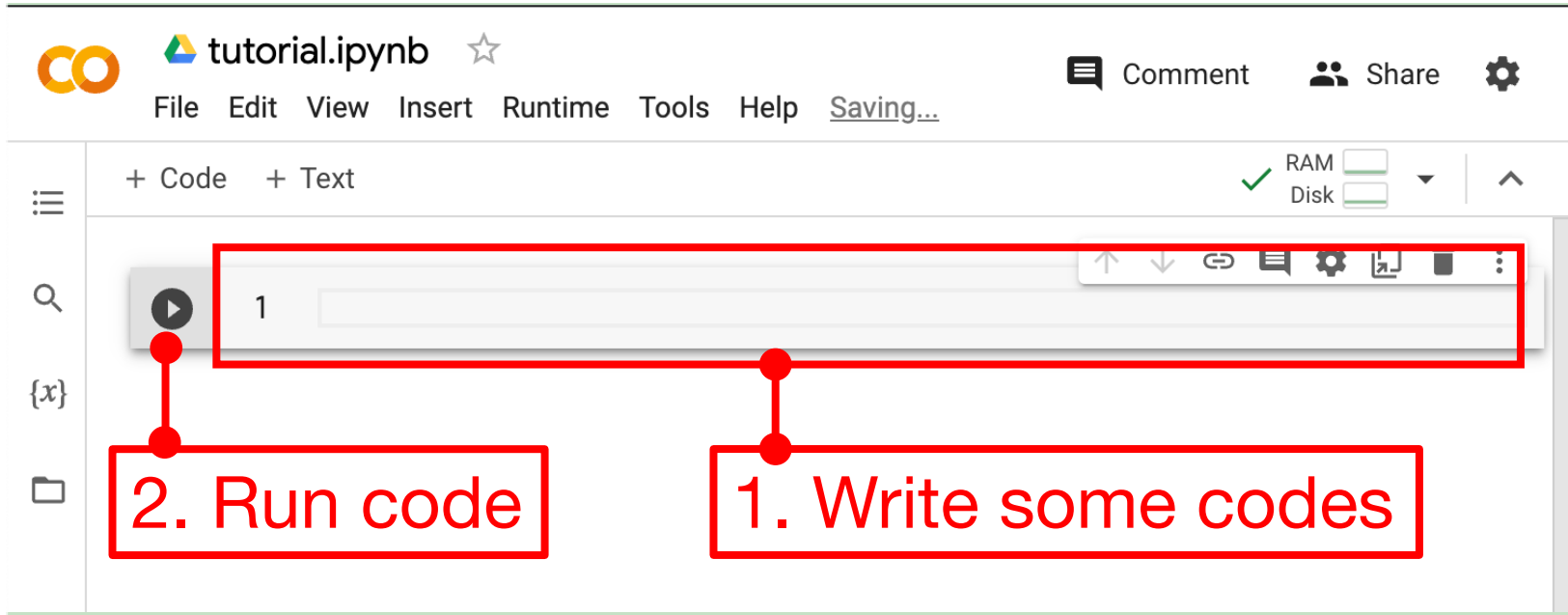
# What is Google Colaboratory?

- ◆ **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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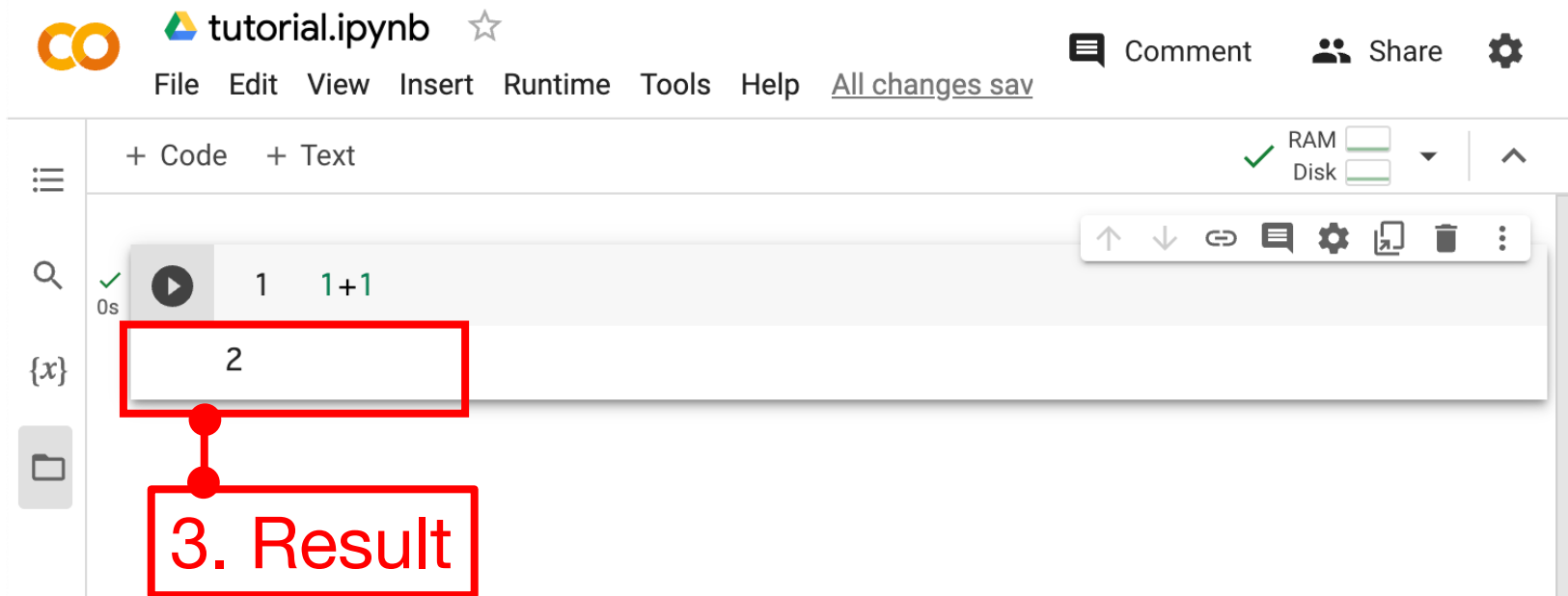
+ Code + Text

RAM ☐ Disk ☐

1

1. Write some codes

2. Run code



tutorial.ipynb ☆

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+ Code + Text

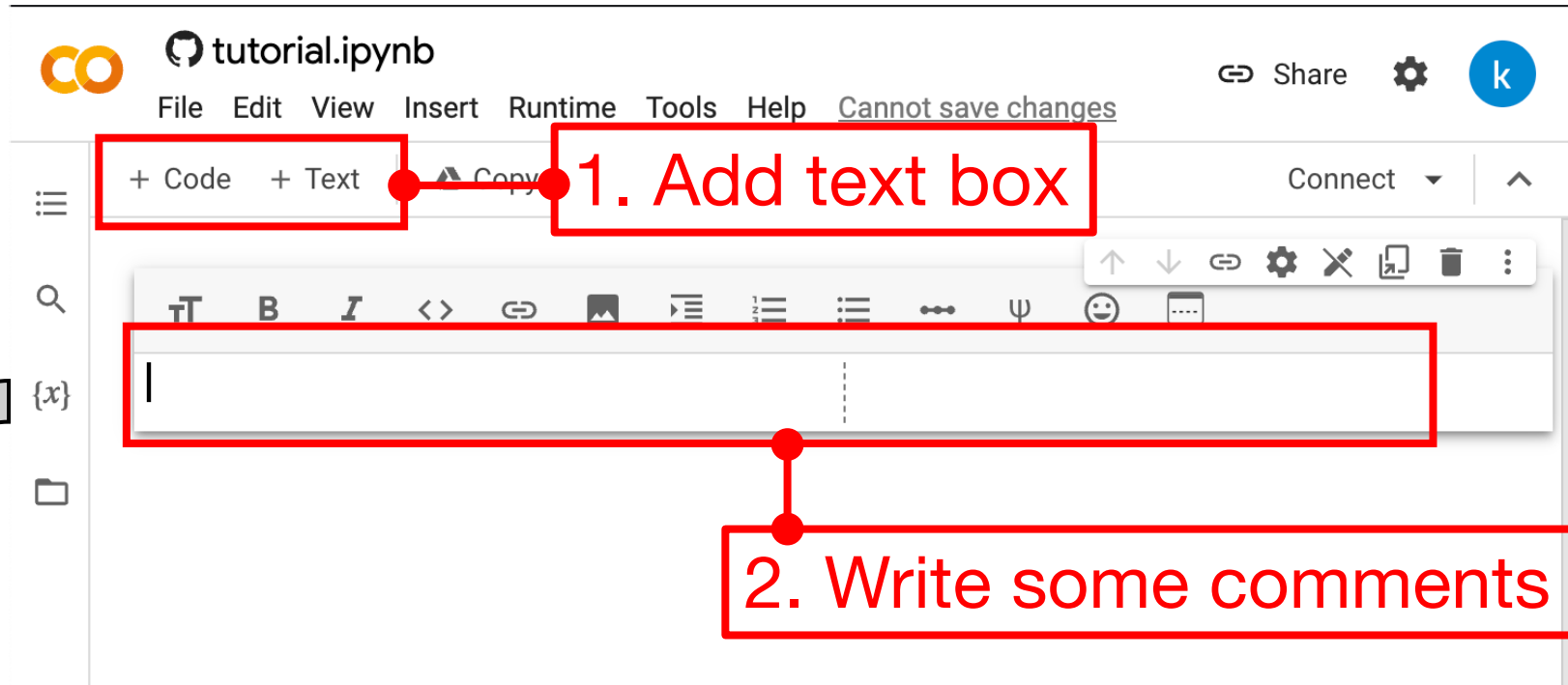
RAM ☐ Disk ☐

1 1+1

2

3. Result

# Writing note



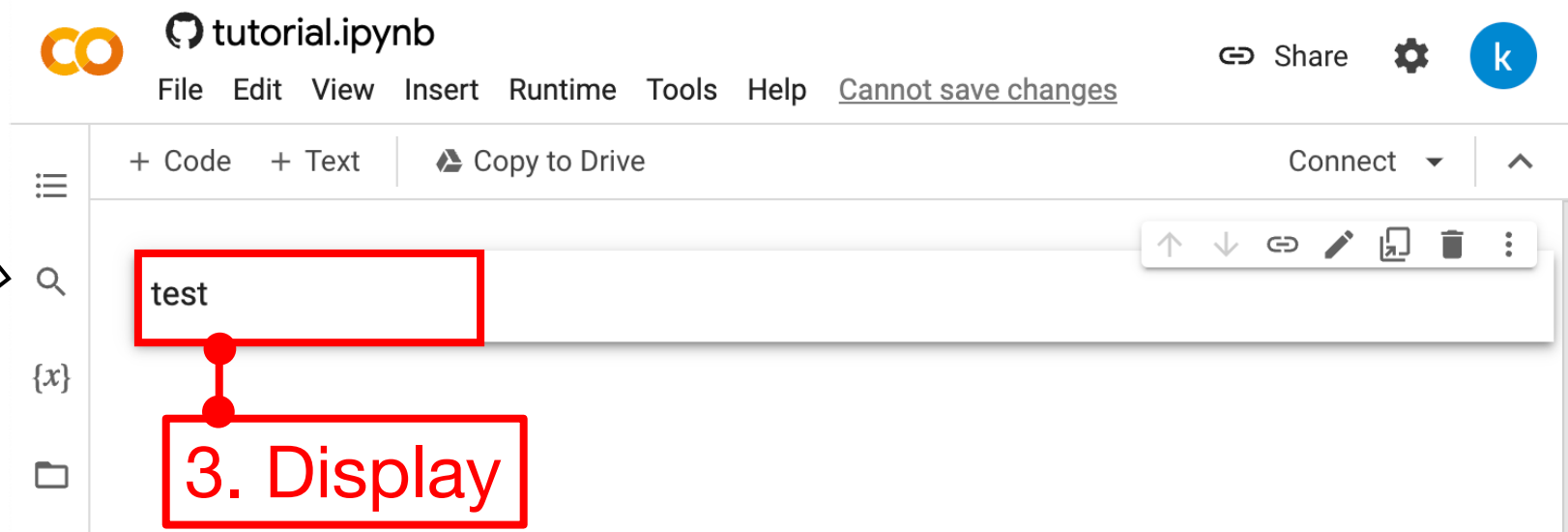
tutorial.ipynb

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+ Code + Text Copy

1. Add text box

2. Write some comments



tutorial.ipynb

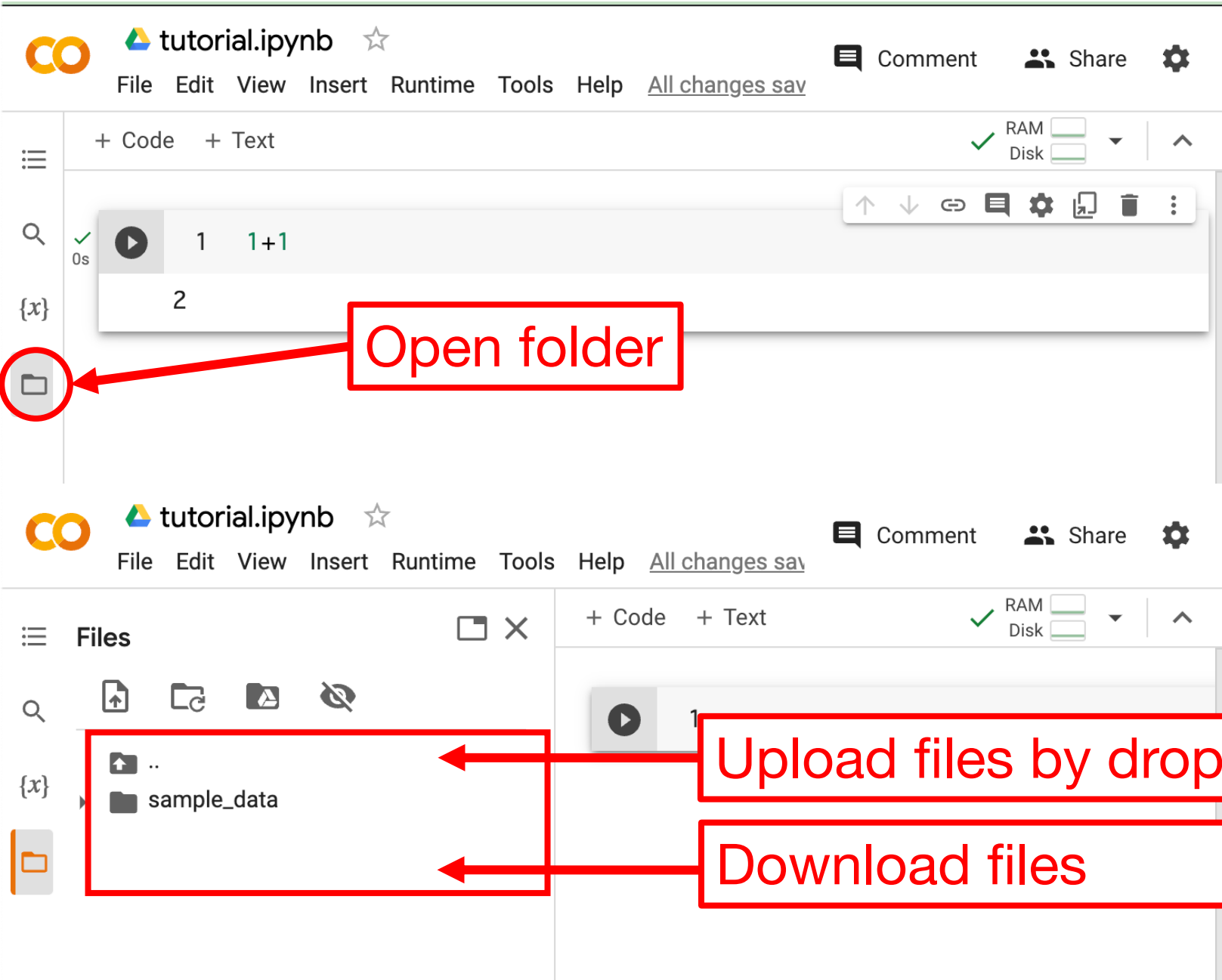
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+ Code + Text Copy to Drive

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 circle highlights the folder icon in the left sidebar, with a red arrow pointing to it from a box labeled "Open folder". The bottom screenshot shows the "Files" panel on the left, which displays a file explorer view with a folder named `sample_data`. Two red boxes are overlaid on the file explorer: one around the `sample_data` folder with a red arrow pointing to it from a box labeled "Upload files by drop-and-dragging", and another around the bottom of the file explorer with a red arrow pointing to it from a box labeled "Download files".

tutorial.ipynb ☆

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+ Code + Text

RAM  Disk 

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✓ 0s 1 1+1

2



{x}

Open folder

tutorial.ipynb ☆

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RAM  Disk 

Files

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..

sample\_data

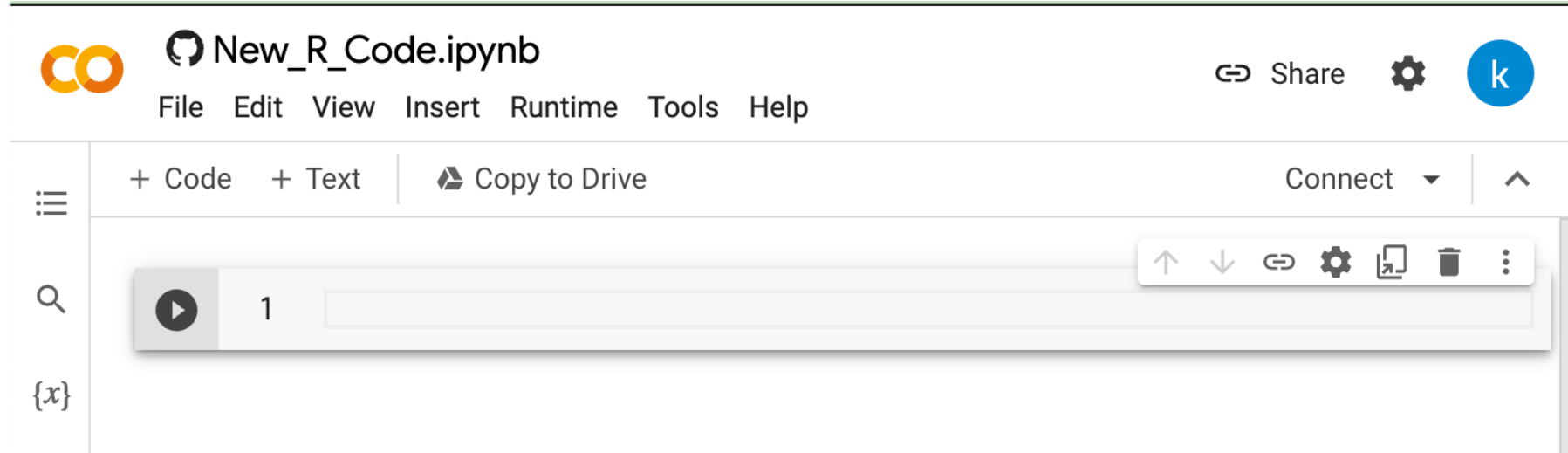
Upload files by drop-and-dragging

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](https://github.com/kento-koyama/bayesian_predictive_micro_ICPMF12/blob/main/Extra_templates/New_R_Code.ipynb)