A female megachile leafcutter bee collecting pollen from a blanket flower (*Gaillardia aristata*) to use in making a beeloaf. Image courtesy of Jim McCulloch.

# Buzzing Through Data in SAS® Viya® Workbench With SAS and Python
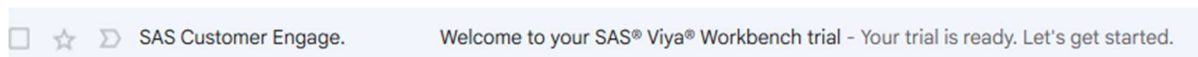
SAS INNOVATE PRE-CONFERENCE SEMINAR

CHARU SHANKAR

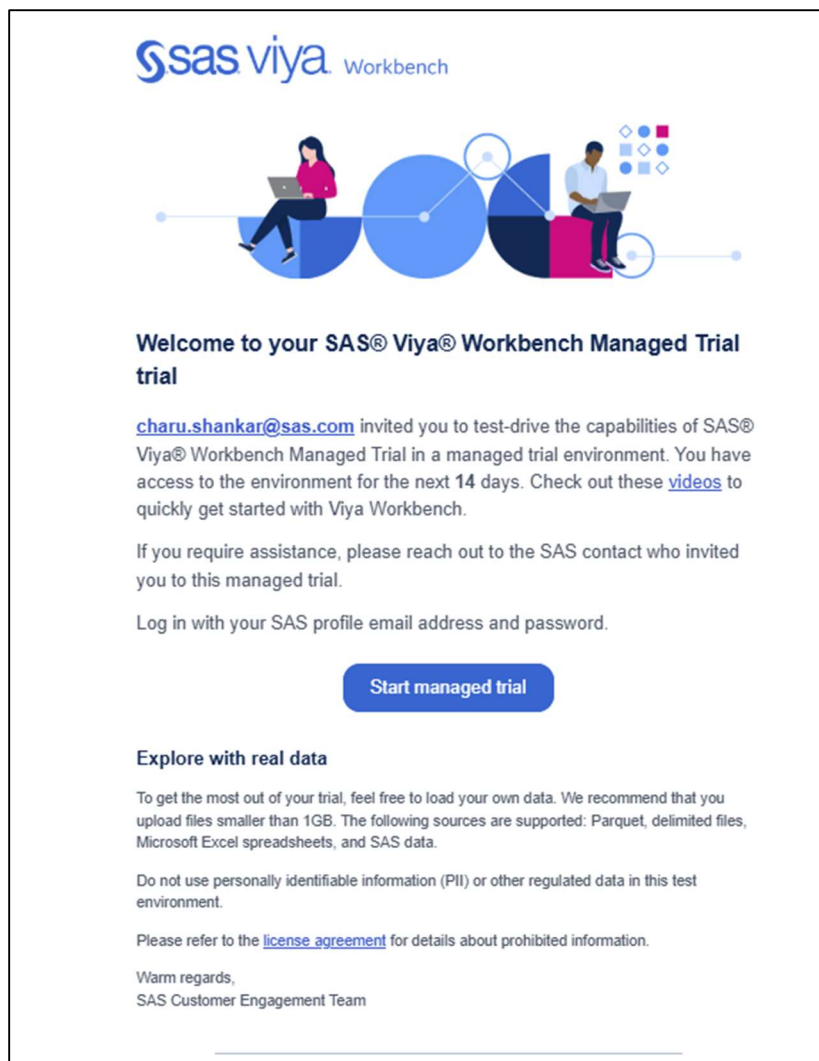Companion Document – Getting Started with SAS Viya Workbench

**TABLE OF CONTENTS**

## LAUNCH SAS Viya Workbench

- Locate the SASY Viya Workbench Managed trial email invitation From the SAS Customer Engagement Team.

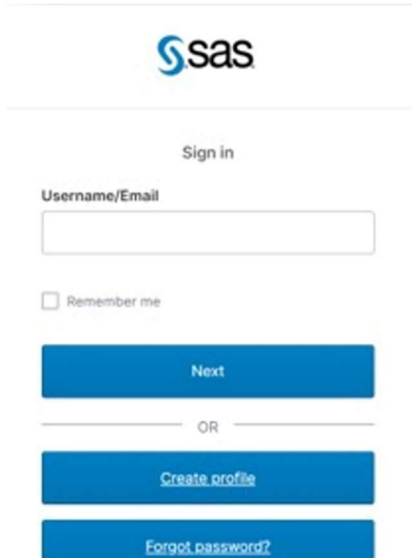☐ ☆ ⟩ SAS Customer Engage.　　Welcome to your SAS® Viya® Workbench trial - Your trial is ready. Let's get started.

- Launch Workbench by clicking on the Start Managed Trial link in the invitation email



**§sas viya.** Workbench

**Welcome to your SAS® Viya® Workbench Managed Trial trial**

charu.shankar@sas.com invited you to test-drive the capabilities of SAS® Viya® Workbench Managed Trial in a managed trial environment. You have access to the environment for the next **14** days. Check out these videos to quickly get started with Viya Workbench.

If you require assistance, please reach out to the SAS contact who invited you to this managed trial.

Log in with your SAS profile email address and password.

**Start managed trial**

**Explore with real data**

To get the most out of your trial, feel free to load your own data. We recommend that you upload files smaller than 1GB. The following sources are supported: Parquet, delimited files, Microsoft Excel spreadsheets, and SAS data.

Do not use personally identifiable information (PII) or other regulated data in this test environment.

Please refer to the license agreement for details about prohibited information.
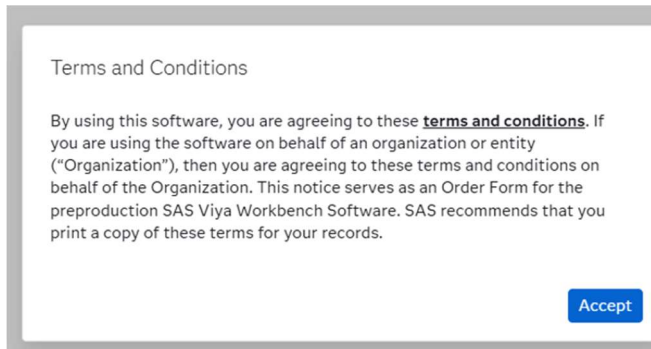
Warm regards,
SAS Customer Engagement Team

## LOGIN With SAS Profile

- You will then be promoted to sign in with your SAS Profile credentials. Click on create Profile if profile doesn't exist



- Accept the terms and conditions
(*click on the terms & conditions & save those for your records*)



- Once logged in, you will land at the Workbench Home Page:

## CREATE A New On Demand Computing Environment

Select New Workbench when you land at the Viya Workbench Home page
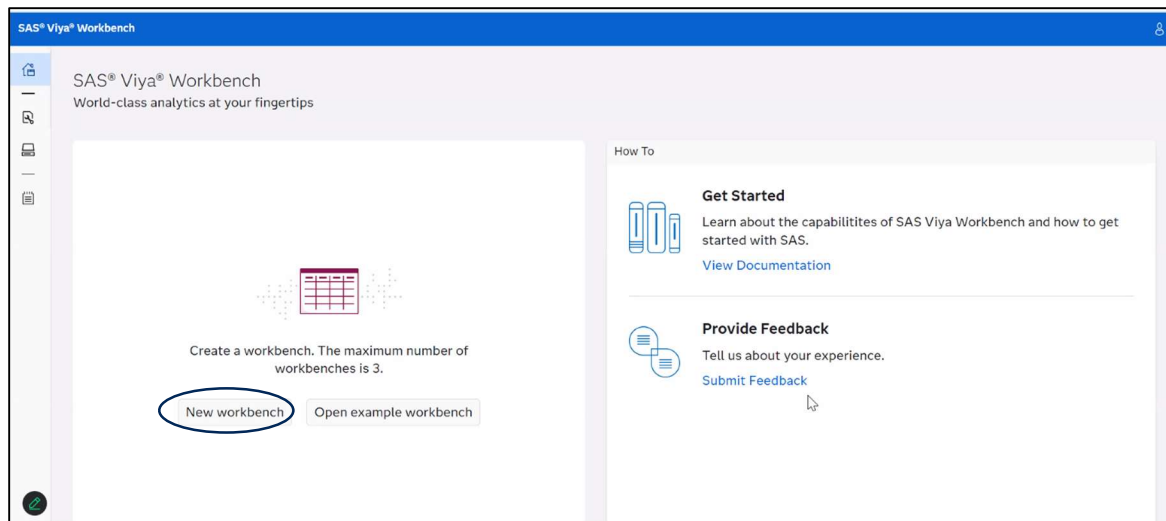
- Create a new workbench from the Workbench setting screen
- Retain the settings at their default; leave the maximum compute core to use at 2 cores and then click **OK**.



Your workbench is created!

Buzzing Through Data in SAS® Viya® Workbench With SAS and Python

## LAUNCH Visual Studio Code

VS Code in SAS Viya Workbench provides a versatile, integrated environment for coding, debugging, and managing data science projects, allowing users to efficiently work with both Python and SAS scripts.

- Click the Open Visual Studio Code button:
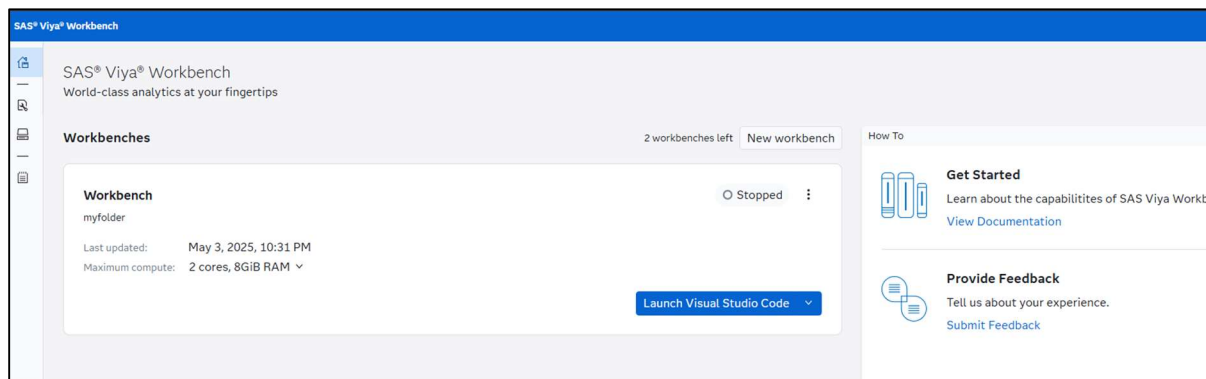


Your workbench container loads! And welcome to **Visual Studio**!
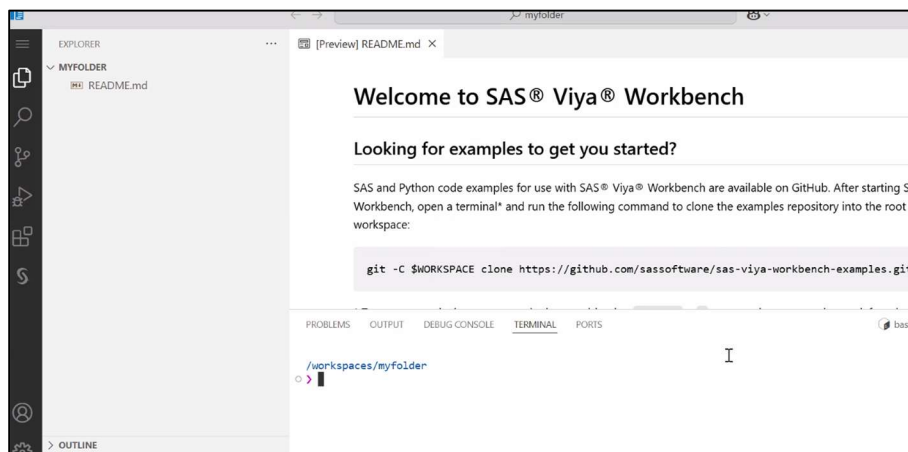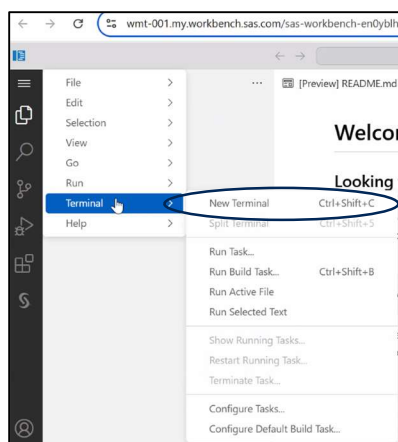


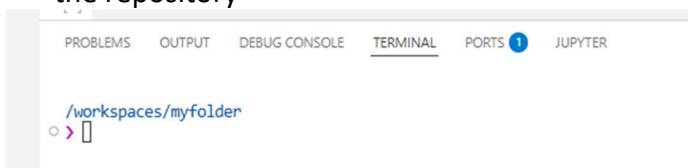## CLONE The GitHub Repository

To get the data for analysis, we'll clone the SASInnovate25 GitHub repository, where it's already available.

*Note: You don't need to type "bash" before cd /workspaces/myfolder in SAS Viya Workbench because it already runs in a Bash shell, the default command-line environment for interacting with Linux systems.*
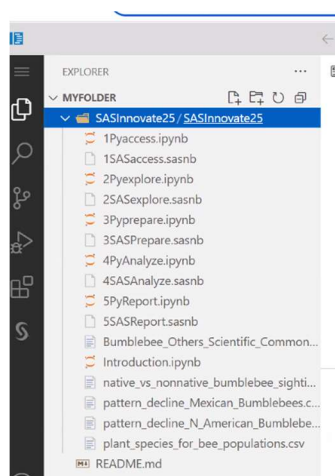
- Click on the hamburger (3 horizontal lines) icon on the top left corner of your workbench screen & select New terminal

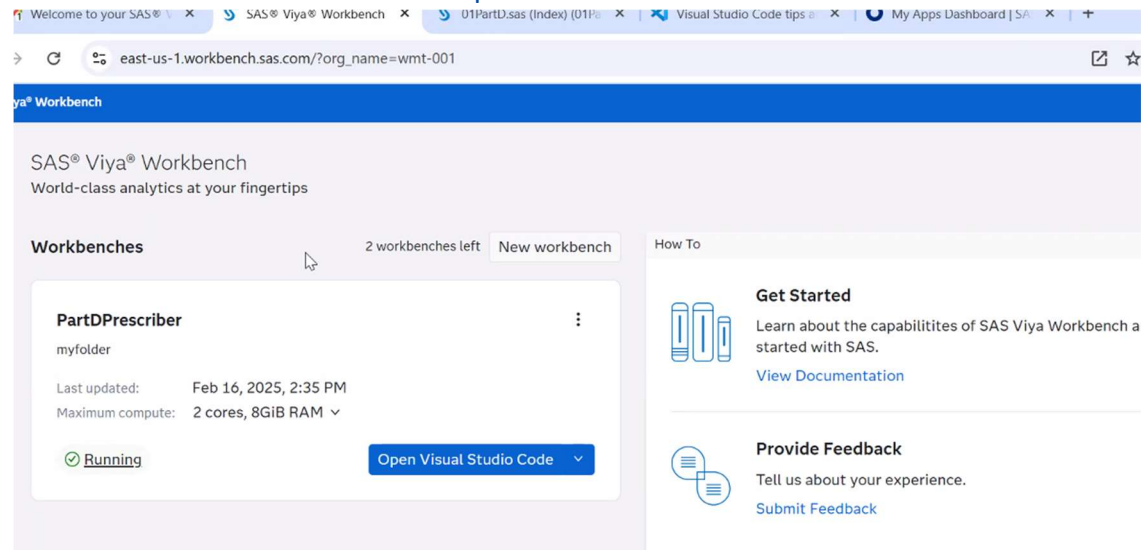- In your terminal, navigate to the directory where you want to store your local copy of the repository



- Type the following command.
```
cd /workspaces/myfolder
```

- Clone your GitHub repository by typing the following command.
```
git clone https://github.com/CharuSAS/SASInnovate25.git
```

- Close the terminal window by clicking the **X** button in the corner of the window.
- Expand the SASinnovate25 folder
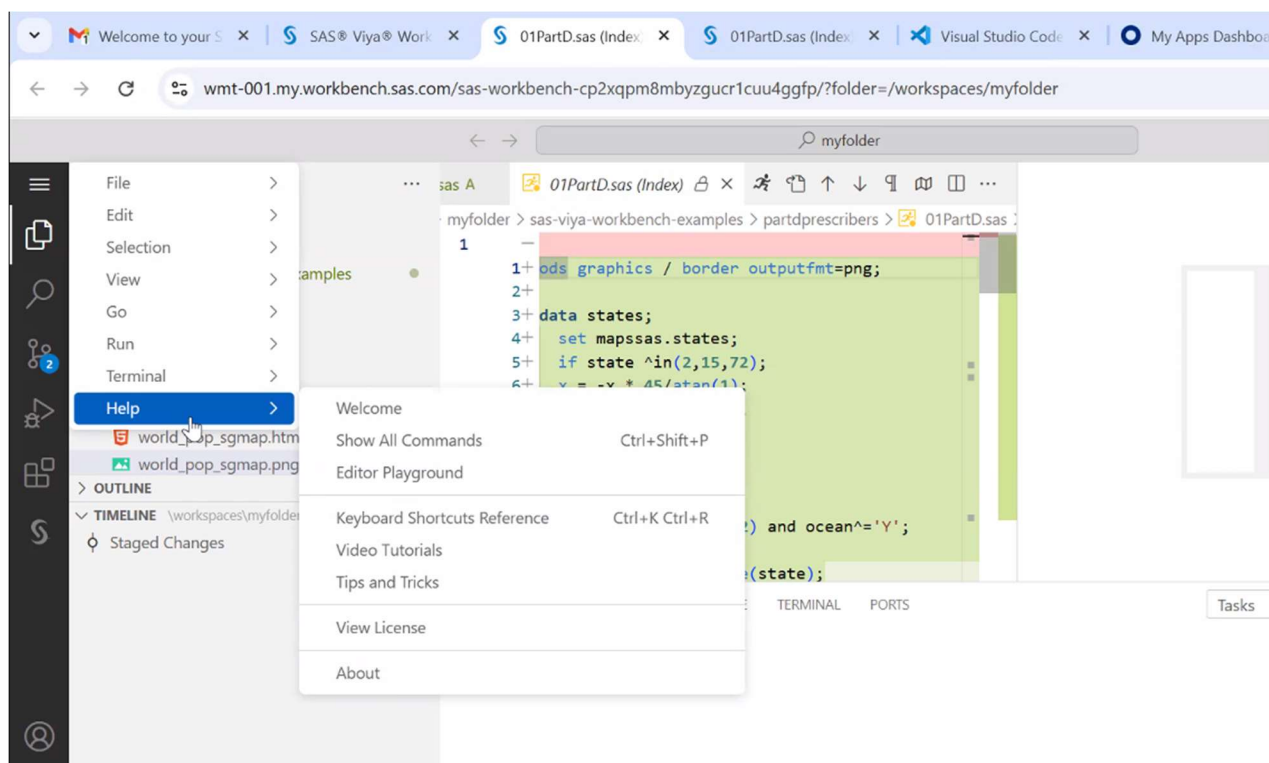- The cloned data and notebooks will be visible

# APPENDIX

## Get started documentation for samples

## Visual Studio Code Primer



## Keyboard Shortcuts for Visual Studio Code

Use these keyboard shortcuts to save time spent on a project in Visual Studio Code.

| Foundation | B | Aadd cell below |
|---|---|---|
| | M | Convert to markdown |
| | Y | Cconverts to code cell |
| | X | Cut code |
| General | Ctrl+Shift+N | New window/instance (Opens a new window immediately) |
| | Ctrl+Shift+W | Close window/instance (Closes new window immediately) |
| Navigation | Ctrl+X | Cut line (empty selection) You can erase the whole line you selected. |
| | Alt+ ↑ / ↓ | Move line up/down. Without having to erase |
| | Shift+Alt + ↓ / ↑ | Copy line up/down. Copies the line as many times as you press the arrow. |
| | Ctrl+Shift+K | Delete line. This will delete the whole line instantly. |
| | Home / End | Go to beginning/end of line. |
| | Ctrl+Home | Go to beginning of file |
| | Ctrl+End | Go to end of file |
| Search and replace | Ctrl+F | Find. This will open the search global find sidebar. |
| | Ctrl+H | Replace. Opens the taskbar where you can specify replacement |

| | | |
|---|---|---|
| **Multi-cursor and selection** | Alt+Click | Insert cursor. You can insert the cursor on as many lines at once and write the same thing at the same time on all lines |
| | CTRL+D | Multi-select an element. E.g. change the H3 tags to the H4 tags (all of them) in a file. Select one H3 tag and use the shortcut. This will find every H3 tag and give you an active cursor for further action. |
| | Ctrl+U | Undo last cursor operation. |
| | Shift+Alt+I | Insert cursor at end of each line selected |
| | Ctrl+L | Select current line. Same as mouse copy and paste. |
| **Rich language editing** | Ctrl+Space | Trigger suggestion. The program will automatically suggest. |
| | Shift+Alt+F | Format document |
| **Editor management** | Ctrl+F4, Ctrl+W | Close editor |
| | Ctrl+\ | Split editor |
| | Ctrl+ 1 / 2 / 3 | Focus into 1st, 2nd or 3rd editor group |
| **File Management** | Ctrl+N | New File |
| | Ctrl+O | Open File |
| | Ctrl+S | Save |
| | Ctrl+Shift+S | Save As |
| | Ctrl+F4 | Close |
| | Ctrl+Shift+T | Reopen closed editor |
| | Ctrl+Tab | Open next |
| **Display** | Ctrl+B | Toggle Sidebar visibility |
| | Ctrl+Shift+F | Show Search |
| | Ctrl+Shift+G | Show Source Control |
| | Ctrl+Shift+H | Replace in files |
| | Ctrl+Shift+U | Show Output panel |
| | Ctrl+Shift+V | Open Markdown preview |
| **Integrated Terminal** | Ctrl+` | Show integrated terminal |
| | Ctrl+Shift+` | Create new terminal |