



Doing More with DABs

LECTURE

# Developing Locally with Visual Studio Code (VSCode)



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In this lecture, we explore how to develop Databricks projects locally using Visual Studio Code (VSCode) for efficient coding and debugging.

# Developing Locally with (VSCode)

## Developer Tools Overview



### Databricks CLI

- Ideal for shell scripting & lightweight command-line tasks
- Useful in development and CI/CD processes
- Supports unified authentication (OAuth, PATs, etc.)
- More interactive debugging compared to Notebooks



### Databricks Connect V2



### Databricks VSCode Extension



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For many developers, using an IDE like VSCode is the preferred choice. With VSCode, you can interact with your Databricks environment in multiple ways, allowing you to stay within the IDE and avoid switching to the Databricks browser UI. Let's quickly review some of the tools you can use within VSCode.

First, you can install the Databricks CLI locally.

The Databricks CLI allows for quick interactions with Databricks through the command line. It's ideal for tasks such as:

- Shell scripting and lightweight command-line tasks
- Development and CI/CD processes
- Supporting unified authentication (OAuth, PATs, etc.)
- Providing more interactive debugging compared to using the CLI in Notebooks

# Developing Locally with (VSCode)

## Developer Tools Overview



### Databricks CLI

- Ideal for shell scripting & lightweight command-line tasks
- Useful in development and CI/CD processes
- Supports unified authentication (OAuth, PATs, etc.)
- Limited interactive debugging compared to IDEs



### Databricks Connect V2

- Runs Apache Spark code remotely on a Databricks cluster from a local environment
- Ideal for interactive debugging and remote Spark job execution
- Easy setup with `pip install databricks-connect>= your version`



### Databricks VSCode Extension



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Next, you can install and use Databricks Connect v2.

Databricks Connect v2 allows you to interact with Databricks from anywhere, enhancing flexibility and productivity.

With Databricks Connect v2, you can:

- Run Apache Spark code remotely on a Databricks cluster from a local environment
- Ideal for interactive debugging and remote Spark job execution
- Easy setup with `pip install databricks-connect>=<your version>`

# Developing Locally with (VSCode)

## Developer Tools Overview



### Databricks CLI

- Ideal for shell scripting & lightweight command-line tasks
- Useful in development and CI/CD processes
- Supports unified authentication (OAuth, PATs, etc.)
- Limited interactive debugging compared to IDEs



### Databricks Connect V2

- Runs Apache Spark code remotely on a Databricks cluster from a local environment
- Ideal for interactive debugging and remote Spark job execution
- Easy setup with pip install databricks-connect>=13.0.28



### Databricks VSCode Extension

- Integrates Databricks into VS Code for batch and interactive development
- Simplifies setup with resource explorers and Databricks CLI
- Supports running and debugging Python files on Databricks clusters
- Keeps developers within VS Code, and provides DAB features



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Lastly, you can use the Databricks VSCode Extension.

This extension enhances your IDE experience by integrating Databricks functionalities directly into Visual Studio Code.

With the VSCode extension, you can:

- Integrate Databricks into VS Code for both batch and interactive development
- Simplify setup with resource explorers and the Databricks CLI
- Run and debug Python files directly on Databricks clusters
- Stay within VS Code while accessing additional bundle user interface features

# Databricks Extension for (VSCode)

## Overview



### Simple Setup

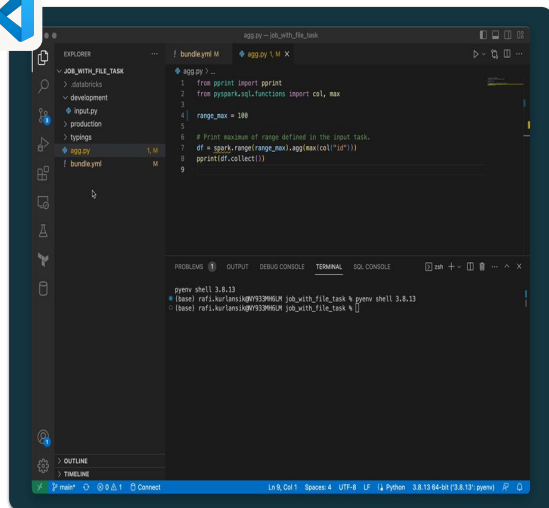
Find us on the VS Code Marketplace and get connected to compute in minutes

### Native Experience

Write code using the productivity features you love from VS Code

### Run on Databricks

Execute batch workloads or start interactively debugging directly from your IDE



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The VSCode extension has a simple setup from the VSCode marketplace, allowing you to get connected to compute in minutes. It provides a native experience for developers who prefer using VSCode and enables you to run code on Databricks directly from your IDE.



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Thank you for completing this lesson and continuing your journey to develop your skills with us.