

# Capturing Logic with Custom Functions in PostgreSQL

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## INTRODUCTION



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# Built-in Functions

## ANSI SQL Standard

SUM

MAX

MIN

CAST

COUNT

FLOOR

CEILING

...

## PostgreSQL Extensions

TRUNC

CBRT

PI

RANDOM

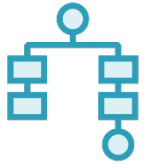
TO\_NUM

TO\_CHAR

NOW

...

# Business Use Cases



Encapsulate business logic



Enforce semantic relationships



Validate and transform data



Control access to sensitive data





Encourage code reuse

Don't Repeat Yourself (DRY)

# Course Overview



Setting up a working environment

Creating your first function

Data types

Polymorphic functions

Function overloading

Stored procedures

Error handling

Course summary

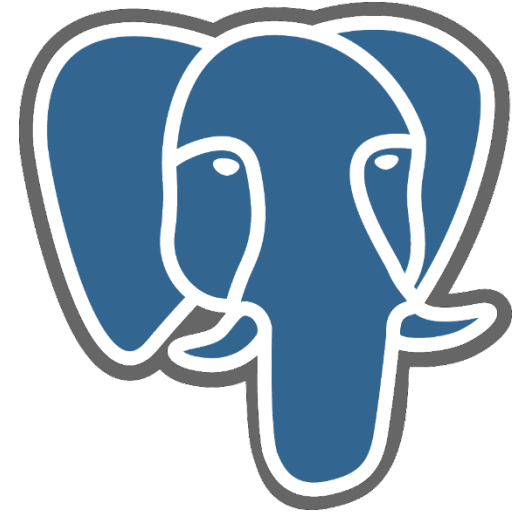
# Setting up the Working Environment



Docker containers



Azure Data Studio



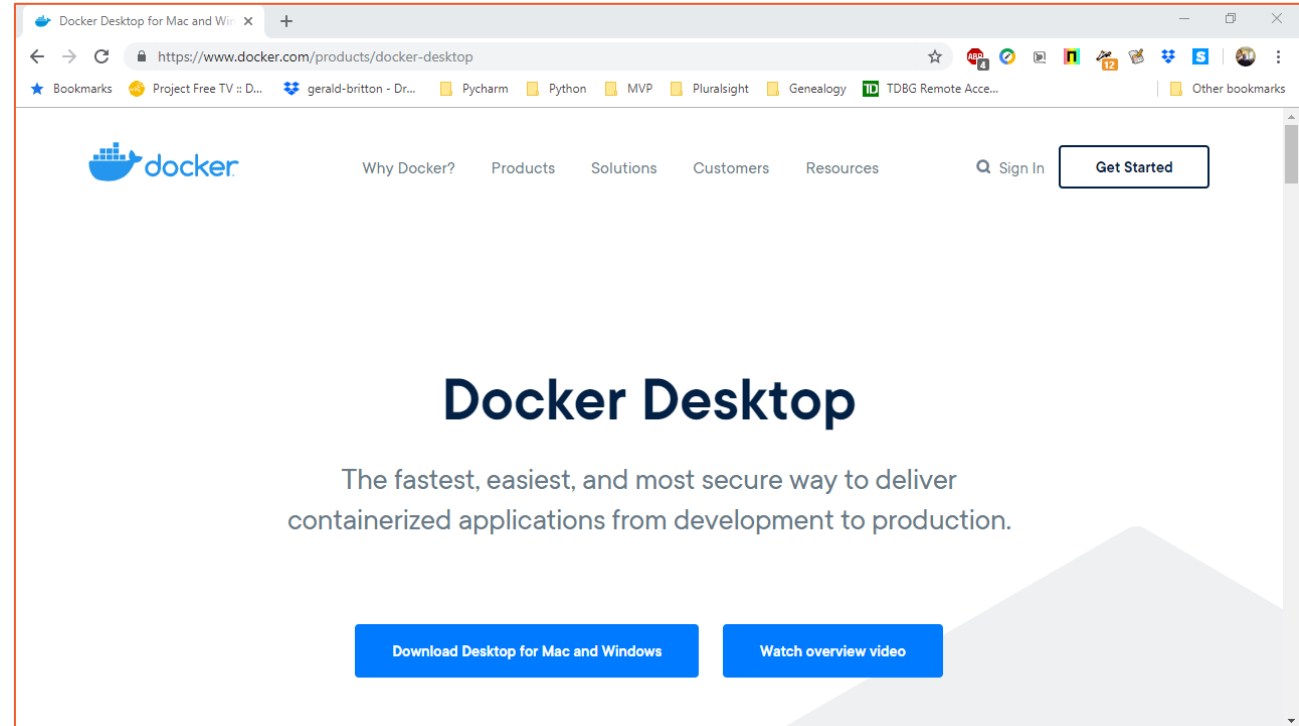
PostgreSQL

# Installing Docker

## Mac and Windows

## Linux

## Getting Started with Docker




<https://www.docker.com/products/docker-desktop>

<https://docs.docker.com/install/>

Pluralsight course by Nigel Poulton

# Installing Azure Data Studio

## Download and install Azure Data Studio

07/10/2019 • 5 minutes to read •  +8

Azure Data Studio runs on Windows, macOS, and Linux.

Download and install the latest release, the *July Release*:

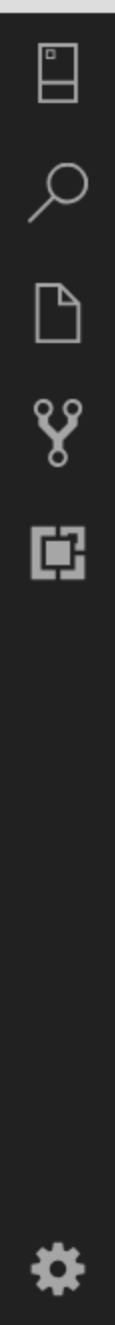
### 📌 Note

If you're updating from SQL Operations Studio and want to keep your settings, keyboard shortcuts, or code snippets, see [Move user settings](#).

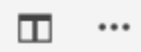
Platform	Download	Release date	Version
Windows	<a href="#">User Installer (recommended)</a> <a href="#">System Installer</a> <a href="#">.zip</a>	July 11, 2019	1.9.0
macOS	<a href="#">.zip</a>	July 11, 2019	1.9.0
Linux	<a href="#">.deb</a> <a href="#">.rpm</a> <a href="#">.tar.gz</a>	July 11, 2019	1.9.0

<https://docs.microsoft.com/en-us/sql/azure-data-studio/download>





Welcome x



## Start

- [New connection](#)
- [New query](#)
- [New notebook](#)
- [Open file](#)

## Recent

No recent folders

## Help

- [Getting started](#)
- [Documentation](#)
- [Report issue or feature request](#)
- [GitHub repository](#)
- [Release notes](#)

☒ Show welcome page on startup

## Customize

### Extensions

Download extensions that you need, including the SQL Server Admin pack...

### Keyboard Shortcuts

Find your favorite commands and customize them

### Color theme

Make the editor and your code look the way you love

## Learn

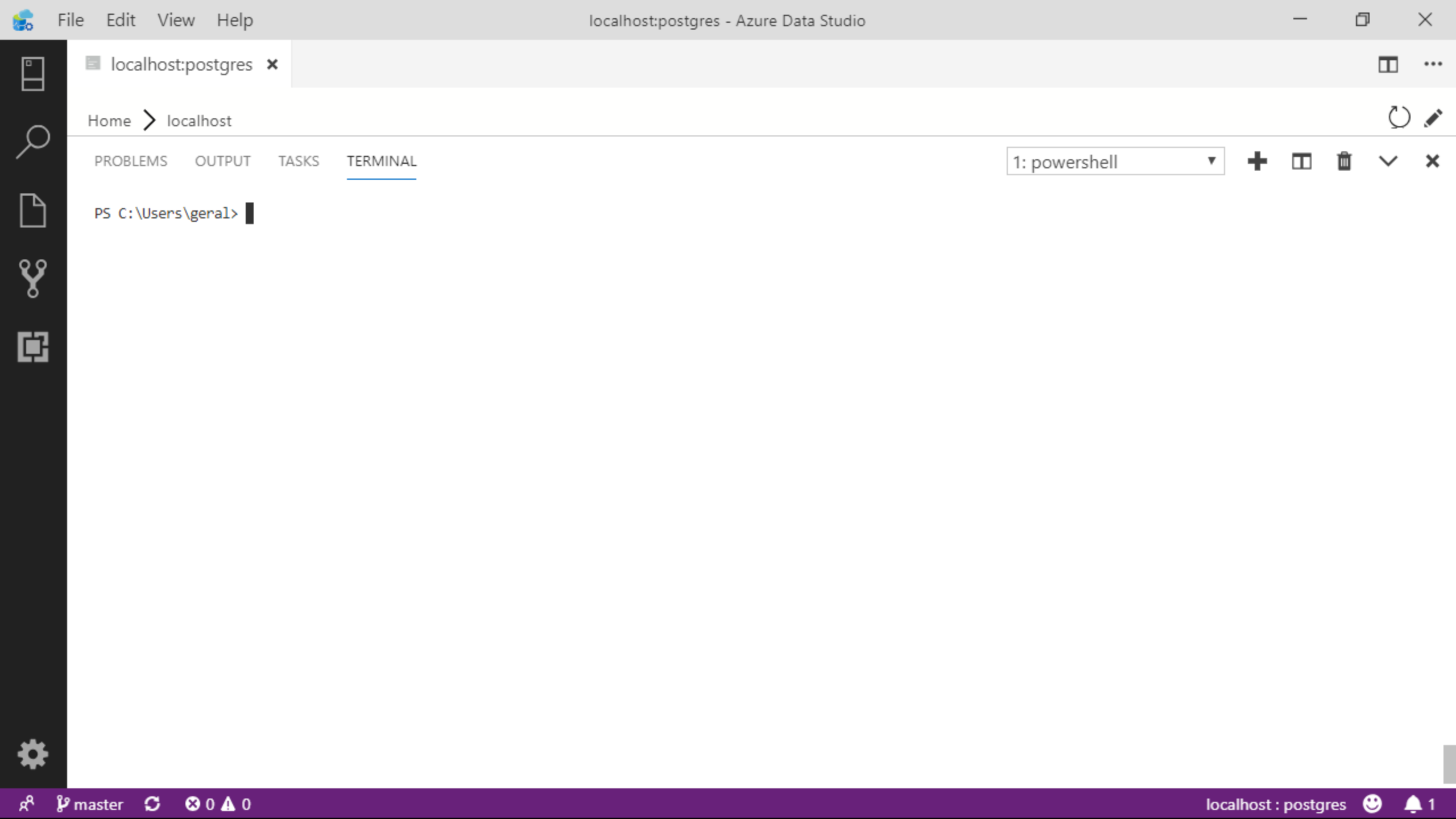
### Find and run all commands

Rapidly access and search commands from the Command Palette (Ctrl+Sh...

### Discover what's new in the latest release

New monthly blog posts each month showcasing our new features

[Follow us on Twitter](#)



localhost:postgres ×



Home > localhost



PROBLEMS OUTPUT TASKS TERMINAL

1: powershell ▾



PS C:\Users\geral> █

# Summary



**Roadmap**

**Setting up a working environment**

**Gist for the course**

- <https://bit.ly/2zjYvEU>