

# Debugging in Go

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## Getting Started with Go and Debugging



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## Version Check



# Version Check



**This version was created by using:**

- Go Language 1.19.2
- Go Delve 1.19.1



# Version Check



**This course is 100% applicable to:**

- Go Language 1.x



# Relevant Notes



## A note on GUI

- This course is built with GUI – Visual Studio Code; however, any other GUI or a standard notepad works perfectly fine



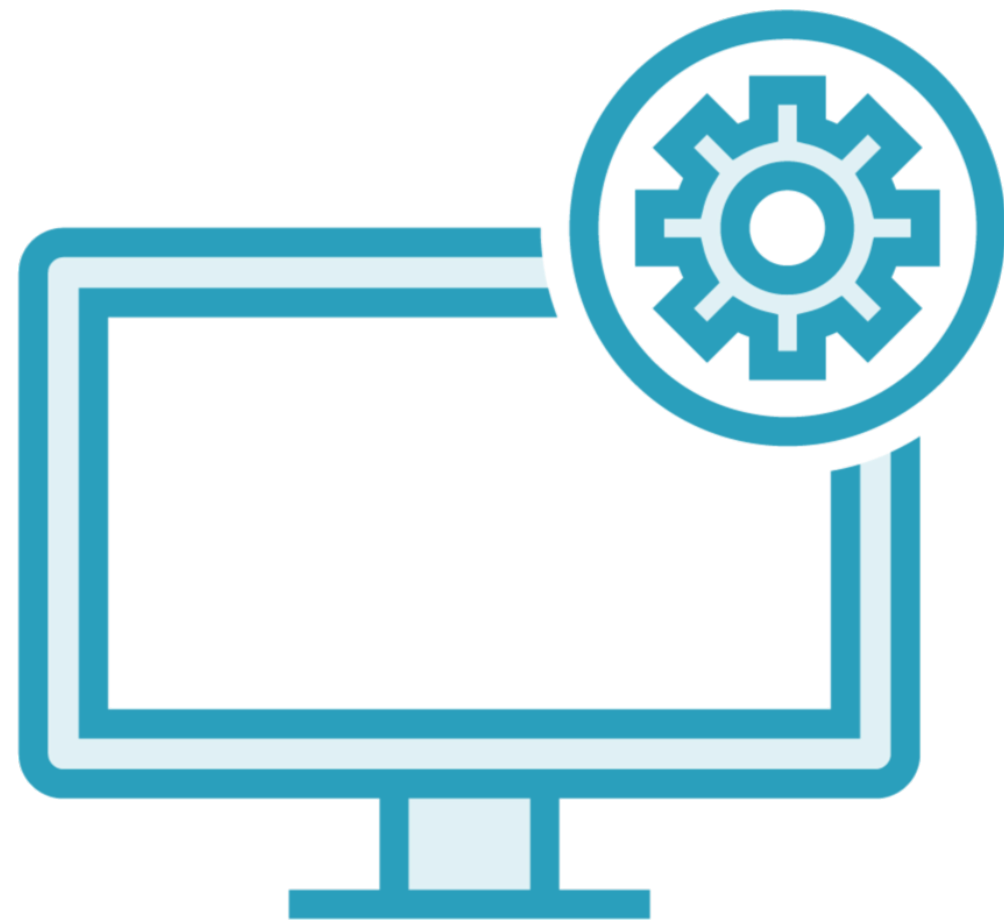
# Intended Outcome



## Learning Debugging in Go Lang

- Printing Variables and Logs
- Delve command line
- Delve with IDE
- Remote Debugging with Delve

# Prerequisites



## Skill

- Fundamentals of Go Language

## Software

- Installation of Go Language
- Tool to edit code
- Command terminal

# Overview



## Popular Debugging Methods

- Print Statement
- Log Package
- Delve Utility

## Scenario Setup

## Demo





# Popular Debugging Methods

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# Print Statement



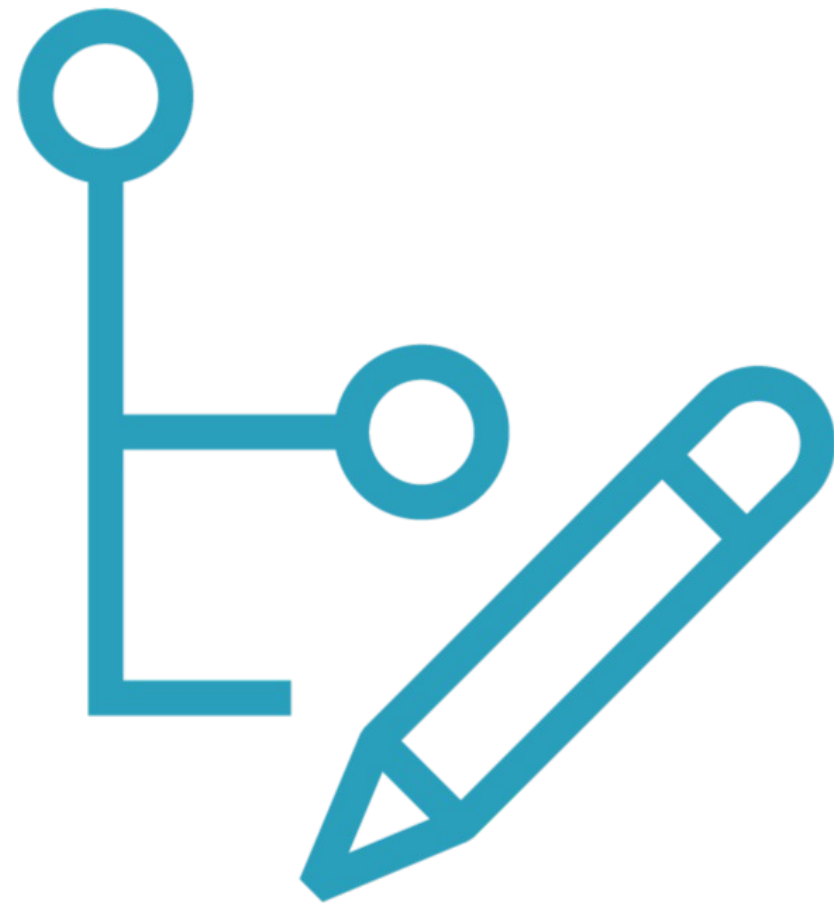
## Pros

- Part of *fmt* package
- Very simple to use

## Cons

- Concurrency is not supported
- Can't handle complex scenarios

# Log Package



## Pros

- Part of *log* package
- Relatively simple to use
- Supports concurrency

## Cons

- Can't handle complex scenarios



# Delve Utility



## Pros

- Command Line
- Integrates with IDE
- Full-featured debugging tool
- Supports remote-debug
- Preferred over GDB

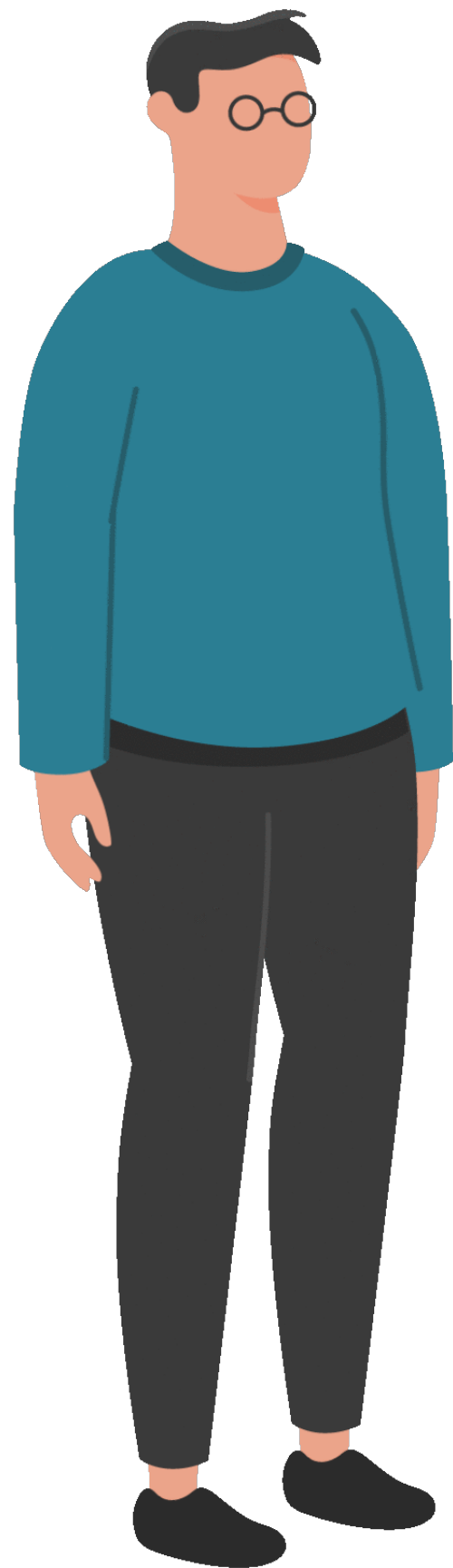
## Cons

- Lots of features can be overwhelming

# Scenario Setup

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## This is Mark!

- It is his first job as a Developer
- He often gets confused with code



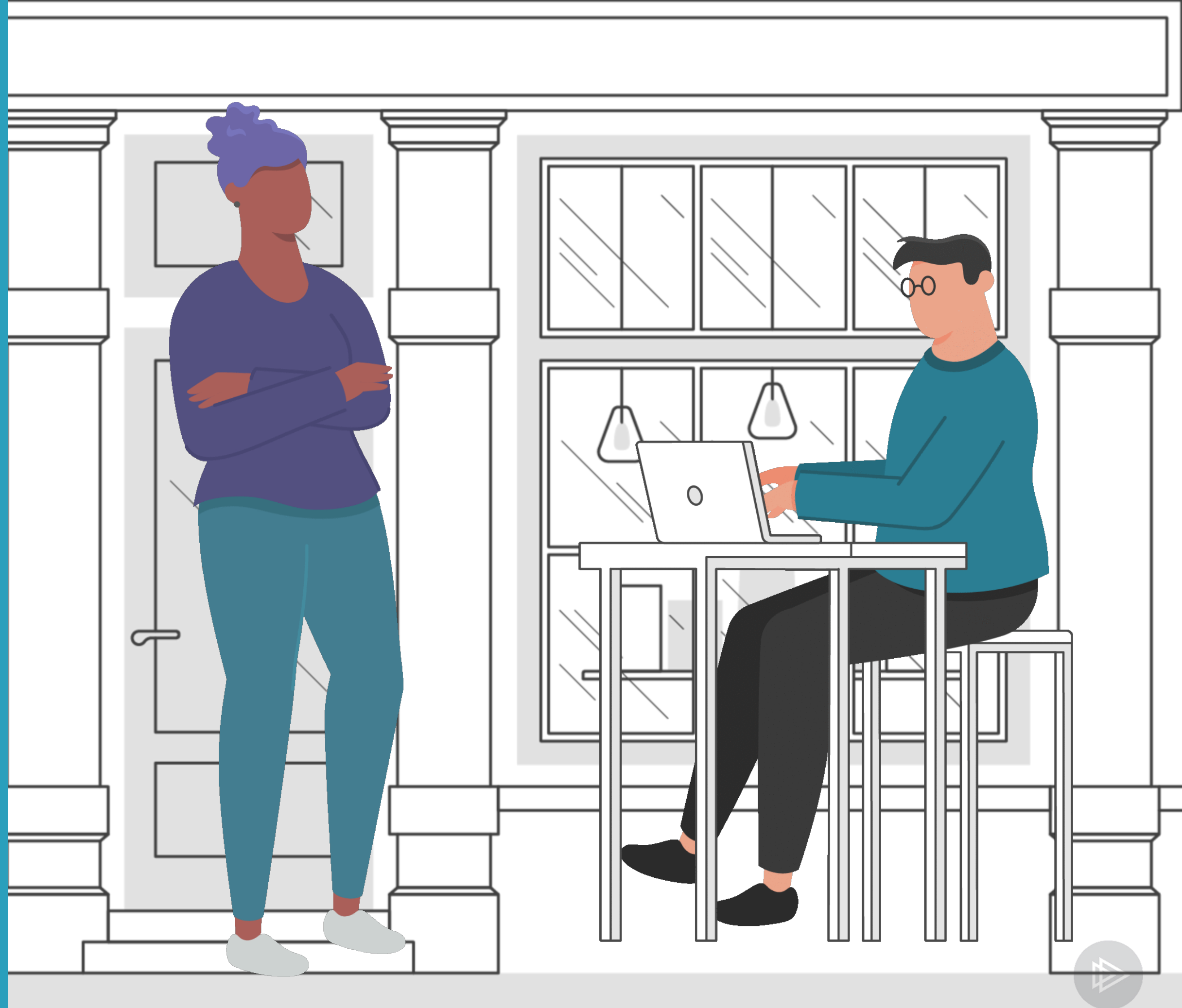


## This is Jen!

- She is an experienced mentor
- Gives tasks with incremental difficulties to Mark so he can learn to code better



- Jen assigns a task to calculate available inventory items to Mark
- Mark to calculate inventory accurately without mistakes





# Demo



## Debugging with Print Statement



# Demo



## Debugging with Log Package



# Demo



## Debugging with Delve Utility



## Summary



**For complex scenarios in Go Language,  
Delve is the best tool for debugging**



Up Next:

Exploring Delve with Command Line and  
Editor Integration

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