**Filename:** *calculator.py* – **Script Overview & Interpretation**

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**Project Name:** Automated Testing Demo

**Script Purpose:**

This script contains basic arithmetic functions – add, subtract, multiply, and divide. It’s designed to be modular clean, and testable.

**Functions Defined:**

* add: Returns the sum of two number
* subtract: Returns the difference
* multiply: Returns the product
* divide: Divides x by y, with zero check

**Key Features:**

* Demonstrates clean Python function structure
* Includes simple control flow and validation
* Can be tested with automated unit tests

**Testing Coverage:**

* Correct outputs for various inputs
* Edge cases such as negative numbers or zero
* Error handling for division by zero

**Learning Outcome:**

This script builds foundational logic for automation testers. It shows working knowledge of:

* Function design
* Applying unit testing (assertEqual, assertRaises)
* Practices safe coding (e.g., input validation)