

Assignment:

Step 1: Python Functions for Basic Mathematical Operations

Here are the Python functions for addition, subtraction, multiplication, and division:

```
def add(x: float, y: float) -> float:
    """
    Takes in two numbers x and y and returns the sum of the two numbers.
    """
    return x + y

def subtract(x: float, y: float) -> float:
    """
    Takes in two numbers x and y and returns the difference between the two
    numbers.
    """
    return x - y

def multiply(x: float, y: float) -> float:
    """
    Takes in two numbers x and y and returns the product of the two numbers.
    """
    return x * y

def divide(x: float, y: float) -> float:
    """
    Takes in two numbers x and y and returns the quotient when x is divided by
    y.
    """
    if y != 0:
        return x / y
    else:
        raise ValueError("Cannot divide by zero")
```

Step 2: Initialize Git Repository and Commit

Navigate to your project directory in the terminal.

Initialize a Git repository: `git init`

Add the Python script to the repository: `git add script.py`

Commit with a proper message: `git commit -m "Initial commit"`

Step 3: Create a Feature Branch with Gitflow

Gitflow is not built-in to Git but is an extension that helps manage the branching workflow. You'll need to ensure it's installed on your system. Once installed:

Initialize Gitflow: `git flow init`

Create a feature branch for division: `git flow feature start division`

Add the division function to the script.

Commit your changes: `git commit -am "Add division function"`

Step 4: Merge Feature Branch using Gitflow

Finish the feature: `git flow feature finish division`

This will automatically merge the feature branch back into the develop branch.

Step 5: Create a Release Branch with Gitflow

Start a release branch: `git flow release start 1.0.0`

Perform any necessary final testing and bug fixes.

Once ready, finish the release: `git flow release finish 1.0.0`

At this point, the release will be merged into both the develop and master branches, and the release tag will be created.