

## CSD325: Advanced Python

### Module 12.2: Redo Assignment –

#### Module 2.2 Assignment: Documented Debugging + Flowchart(s)

Isaac Ellingson

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Program selected: Calculate the sum of the first 5 prime numbers

Accessed from <https://pynative.com/python-find-sum-of-first-n-prime-numbers/> on 12/21/2025

### Step 7 (with debugging started)

```
(venv) [falkreon@localhost] ~/Documents/Class/AdvancedPython/CSD-325/module-2 & python3 find_first_5_primes.py [0]
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(28)<module>()
-> while prime_counter < n:
(Pdb)
```

### Step 8 (stepping into the function)

```
(venv) [falkreon@localhost] ~/Documents/Class/AdvancedPython/CSD-325/module-2 & python3 find_first_5_primes.py [0]
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(28)<module>()
-> while prime_counter < n:
(Pdb) n
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(29)<module>()
-> if is_prime(num):
(Pdb) s
--Call--
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(13)is_prime()
-> def is_prime(num):
(Pdb)
```

### Step 9 (introducing an intentional error and stepping into it)

```
(venv) [falkreon@localhost] ~/Documents/Class/AdvancedPython/CSD-325/module-2 & python3 find_first_5_primes.py [0]
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(28)<module>()
-> while prime_counter < n:
(Pdb) n
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(29)<module>()
-> if is_prime(num):
(Pdb) n
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(30)<module>()
-> print(num)
(Pdb) n
2
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(31)<module>()
-> prime_sum += nums # INTENTIONAL ERROR INTRODUCED: num -> nums
(Pdb) n
NameError: name 'nums' is not defined
> /home/falkreon/Documents/Class/AdvancedPython/CSD-325/module-2/find_first_5_primes.py(31)<module>()
-> prime_sum += nums # INTENTIONAL ERROR INTRODUCED: num -> nums
(Pdb)
```