Solution Review: Implement an Asynchronous Function

This lesson will explain how to implement an asynchronous function to calculate the sum of two numbers n1 and n2.

WE'LL COVER THE FOLLOWING

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Solution: Import the asyncio Library and Call the Asynchronous Coroutine

Solution: Import the **asyncio** Library and Call the Asynchronous Coroutine

- Import the library import asyncio
- Define the function

Asynchronous functions are declared with async def.

```
import asyncio
async def sumNumbers(n1,n2):
   await asyncio.sleep(1)
   return
```

- Call the asynchronous coroutine
 - 1. Create an event loop

```
loop = asyncio.get_event_loop()
```

2. Run async function and wait for completion

```
results = loop.run_until_complete(functionName())
```

3. Close the loop

loop.close()

The following python code explains the concept.

```
import asyncio
async def sum(n1,n2):
    print('Sum numbers', n1, '+', n2)
    await asyncio.sleep(1)
    print('End Sum', n1, '+', n2)
    return n1 + n2
# Create event loop
loop = asyncio.get_event_loop()
n1 = 1
n2 = 2
# Run async function and wait for completion
results = loop.run_until_complete(sum(n1, n2))
print("Sum of two numbers:", n1, "+", n2, "=", results)
# Close the loop
loop.close()
```

Let's move on to the next problem.