Solution Review: Multiple Asynchronous Calls

This lesson will give a detailed review of how to call an asynchronous function multiple times.

WE'LL COVER THE FOLLOWING

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 sum(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(asyncio.gather(
sum(n1, n2)
sum(n1, n2)
sum(n1, n2))
```

  3. Close the loop

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()

# Run async function and wait for completion
results = loop.run_until_complete(asyncio.gather(
    sum(1, 2),
    sum(2, 3),
    sum(3, 4)
))
print(results)

# Close the loop
loop.close()
```

Now that you have an insight into asynchronous programming, let's move on to the quiz.