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

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()
     ```

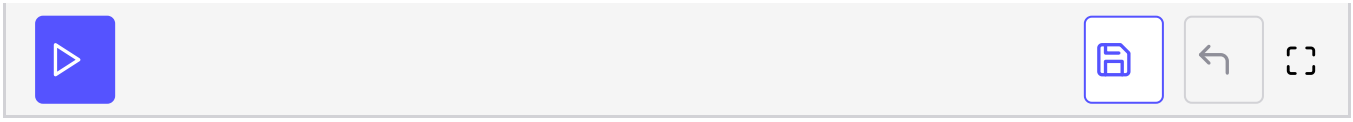
The following python code explains the concept.

```
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.