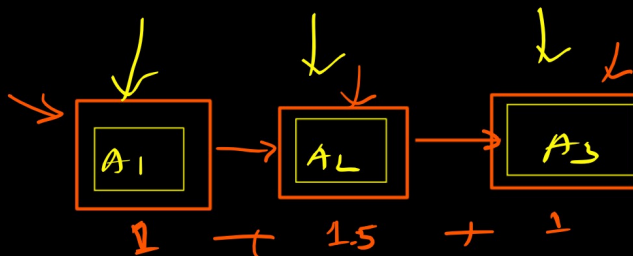


Asynchronous programming in Python is a programming paradigm that allows code to handle multiple tasks concurrently without blocking the program's execution. It is primarily used for I/O-bound tasks (e.g., network requests, file I/O, database queries), allowing the program to perform other operations while waiting for slow external events to complete.

Simple Agent



A_L

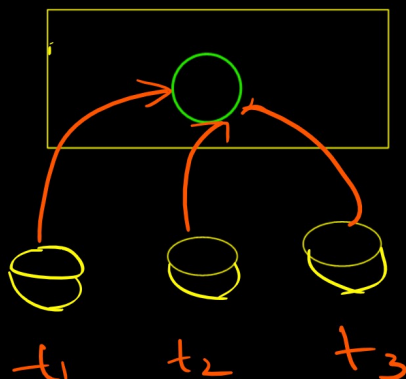


3.5 min

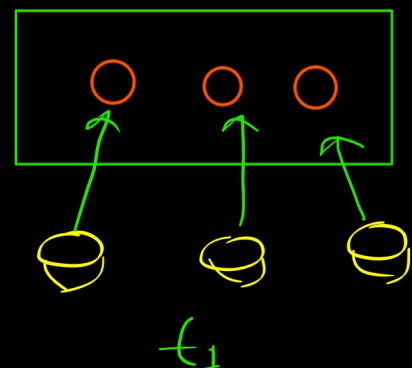
— + Independently
 —→ Dependently

asynchronous

Synchronous programming



Asynchronous programming



Subroutine

```
def fetch_data():  
    ==  
    ==  
    ==
```

```
def main():  
    fetch_data()  
    ==  
    ==  
    == }
```



Co-routine

```
async def fetch_data():  
    ==  
    ==  
    ==
```

```
def main():  
    fetch_data()  
    ==  
    ==  
    ==
```

