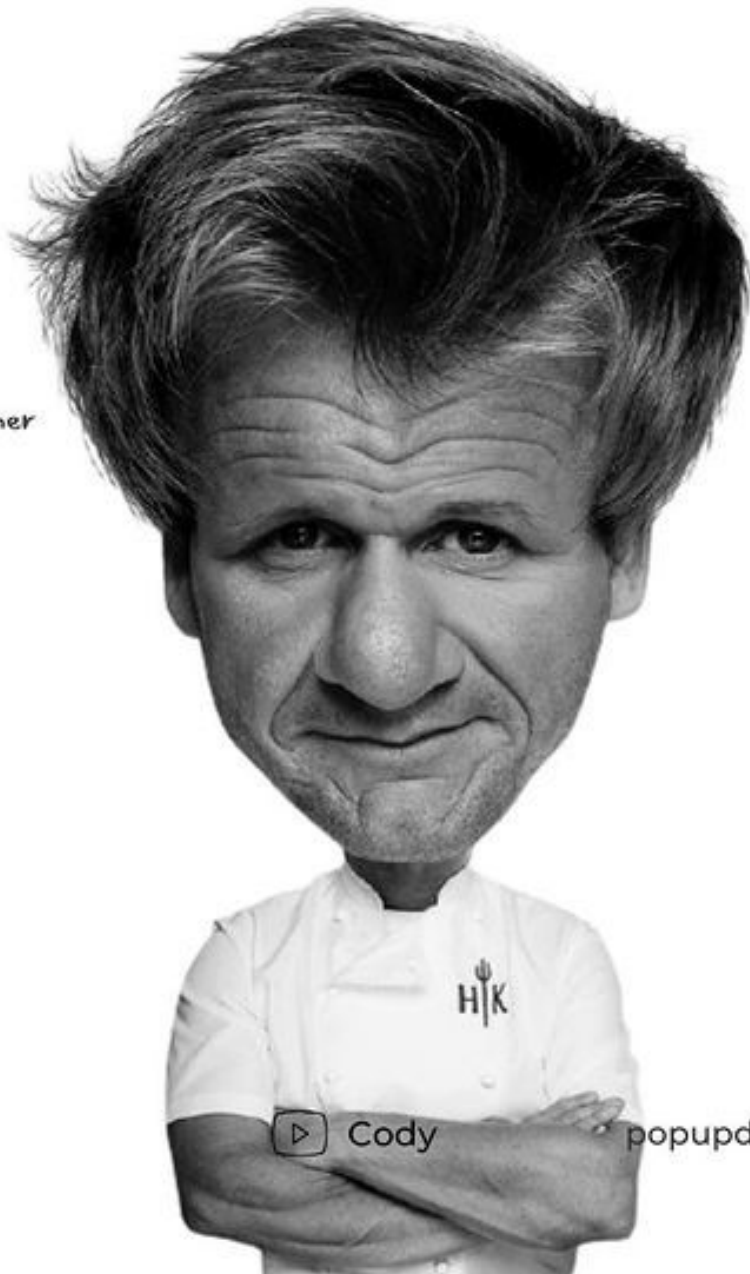




# WHAT IS ASYNCHRONOUS PROGRAMMING

📷 @codechips  
Art Credit : serkanyener



@codechips

▶ Cody

popupdev04@gmail.com



Lets say you want to cook **Pasta**

You can prepare it in 2 possible ways

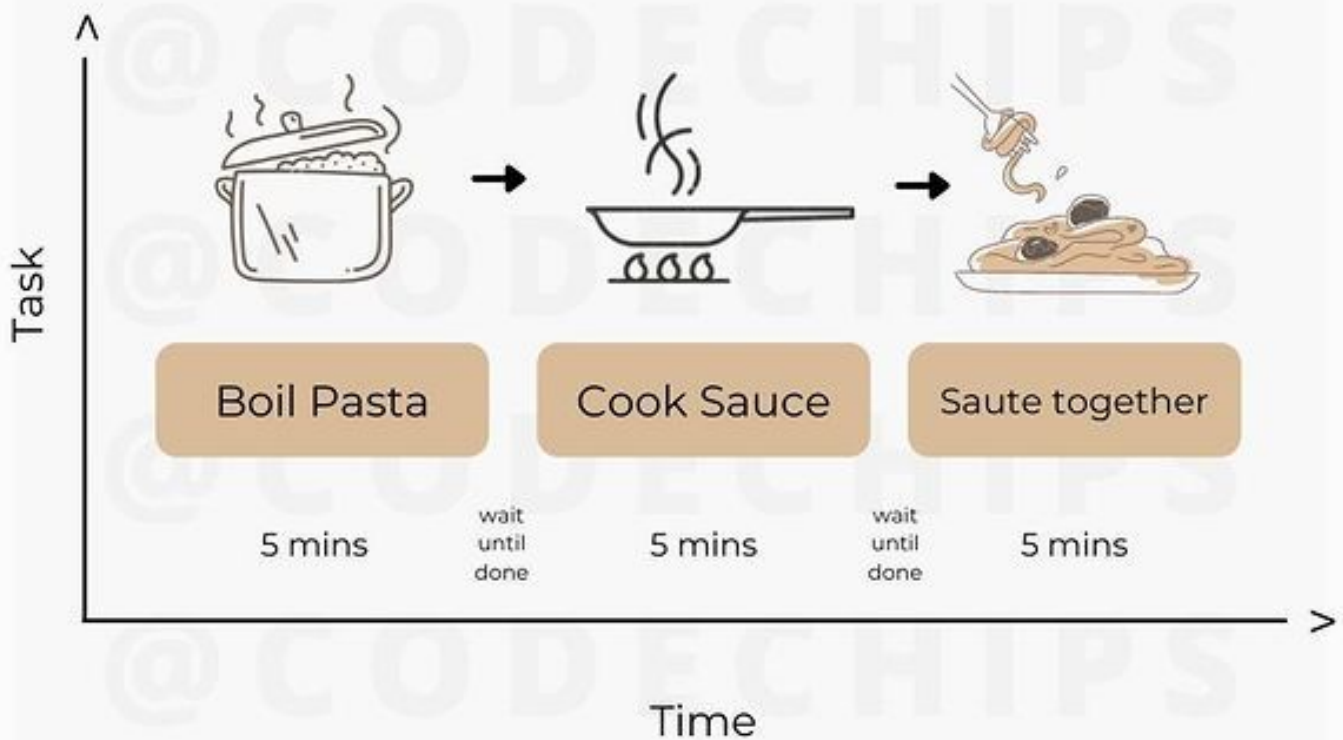


don't worry it will eventually be related to coding .....  
you are in the right place



## Synchronous Way

In synchronous operations tasks are performed one at a time and only when one is completed, the following is unblocked.

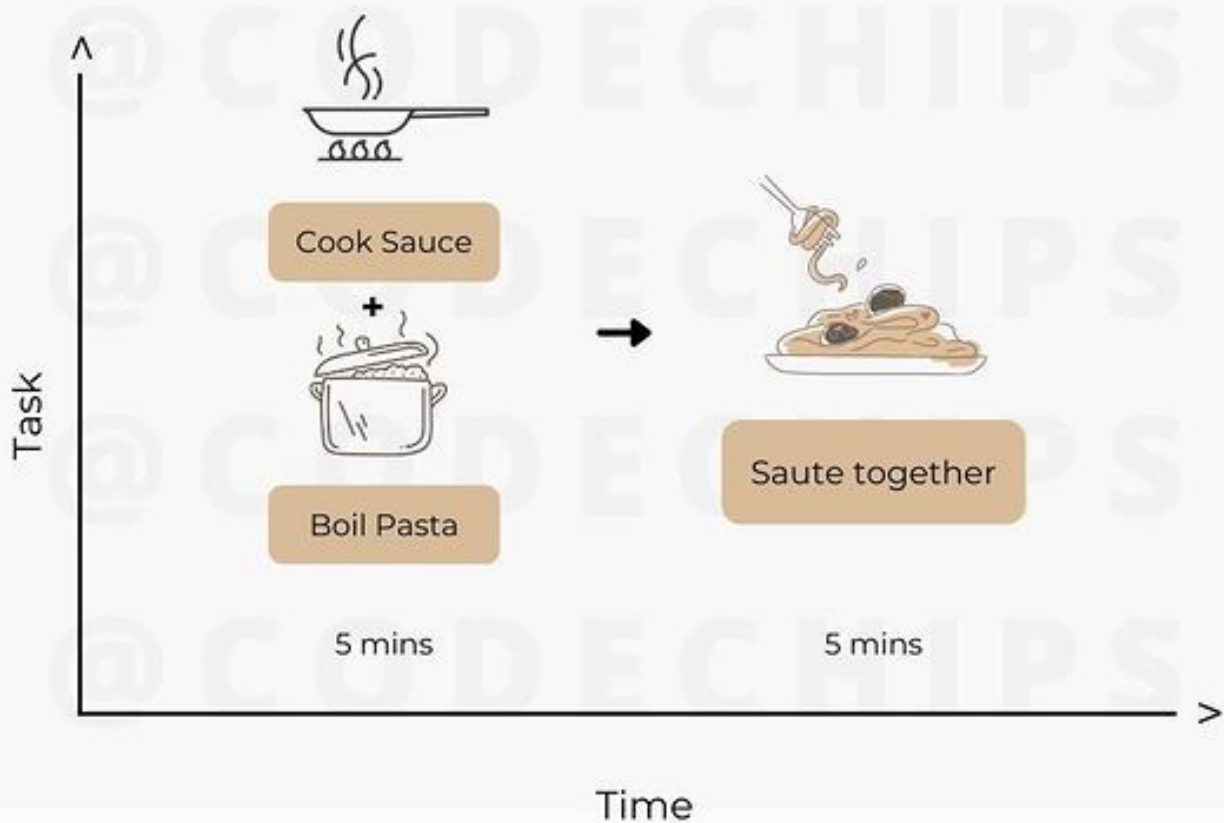




## Asynchronous Way

Why wait until Pasta is boiling ?  
Let's prepare the sauce simultaneously

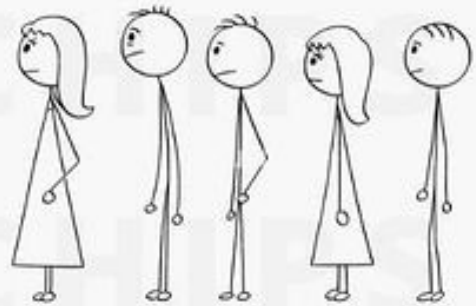
Here you can move to another task before the previous one finishes. making multiple requests simultaneously, in a much shorter period of time without blocking the entire operation





Simply put it as

In synchronous operations tasks are performed in a **sequence**



In asynchronous operations you can move to **another** task before the previous one finishes





## Why use Asynchronous Programming ?

### Responsive UI

The UI must not freeze



### Background

Helps runs process  
in the background

### Efficiency

help to scale and make best  
use of the resources available



Where is it used ?

making API calls

writing/reading to a  
file or database

calling hardware  
like printers



complex lengthy  
calculations

looping through  
thousands of objects