# Code Bot
# "Hello World"

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Python

# So we've made a bot that lives! Let's give it function!

Let's make another event for our bot!

**This time, it's going to respond to messages!**

```
11    @client.event
12    async def on_message(message):
```

This is the incoming
message that we can check!

# First, let's check that the message sent wasn't the bot!

We're going to use what we already know, **if statements**!

Let's check:

1. **If** the **message is the bot**, **return** to normal and don't do anything!
2. Otherwise, we do nothing and move on!

Basically, check if the bot sent the message.

# Checking the message

```
11    @client.event
12    async def on_message(message):
13        if message.author == client.user:
14            return
```

This gets who the author of the message is.

Checks if it's **EQUAL** to the client!

If **it is equal to** the client, **return and stop this check.**

If the message wasn't the client, we move on!

# How do Discord bots know what messages to respond to?

Bots usually have a **specific command key they look for**!

Each bot is different! You get to choose your command key!

Some use #, $, or @.

I've chosen to pick **jp_**

These are my initials before my actual command.

If you're working off of my Development Server, claim your command key [here](#).

# Now we can check the message for our command!

The line of code below checks if the message starts with 'jp_hello'.

```
16     if message.content.startswith('jp_hello'):
```

**This is the command I'm checking!**

# Command is true!

If this if statement is true in that the message does contain 'jp_hello'

Then we've received our command!

```
16    if message.content.startswith('jp_hello'):
17        await message.channel.send('Hello World!')
```

Now we can message back to the
channel "Hello World!"

# Our code overall

This code creates a bot that prints out "Hello World"!

```python
main.py ×

 1    import discord
 2    import os
 3    my_secret = os.environ['TOKEN']
 4
 5    client = discord.Client()
 6
 7    @client.event
 8    async def on_ready():
 9        print('We have logged in as {0.user}'.format(client))
10
11    @client.event
12    async def on_message(message):
13        if message.author == client.user:
14            return
15
16        if message.content.startswith('jp_hello'):
17            await message.channel.send('Hello World!')
18
19    client.run(my_secret)
```

# Let's run it!

Once it says it's ready and running! Let's enter a command into our Discord server!

Once online, type your command! It should respond!

# Lab: Discord Bot

1. Expand the commands your bot can receive!
   a. Be creative, add whatever you want!
2. For this lab, create the "hbd" command.
   a. This command prints out the Happy Birthday song to the user!
3. Challenge
   a. Print it out with the authors name!