




Python Discord Bot

DAY 03

Ever Wondered How Bots Are Made?

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What is Discord Bots?









A standout feature of the multi-level communication platform known as 'Discord' is its bots. Discord Bots are “AI-s” that can carry out various automated tasks on your server from responding to queries, to greeting members. Their functionalities know no boundaries, and you can program them to do anything you want.

As long as you can think it up, you can code it!

So what are you waiting for? Let us code your first discord bot!

Exercise 01: Create your very first bot

	Difficulty:	★
	Objectives:	Populate the server with your very own discord bot.
	Skills required:	Familiarity with discord applications
	Resources:	➤ Introduction to Discord Development ➤ Creating a Bot Account
	Search keywords:	Discord developer bot
	Command required:	N/A



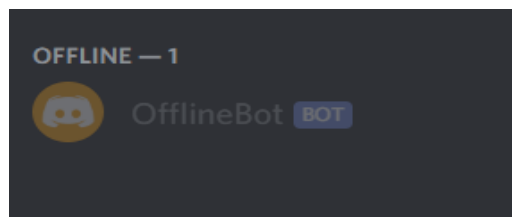
Code snippet:

BOT PERMISSIONS







GENERAL PERMISSIONS	TEXT PERMISSIONS	VOICE PERMISSIONS
<input type="checkbox"/> Administrator	<input checked="" type="checkbox"/> Send Messages	<input type="checkbox"/> Connect
<input type="checkbox"/> View Audit Log	<input type="checkbox"/> Create Public Threads	<input type="checkbox"/> Speak
<input type="checkbox"/> View Server Insights	<input type="checkbox"/> Create Private Threads	<input type="checkbox"/> Video
<input type="checkbox"/> Manage Server	<input type="checkbox"/> Send Messages in Threads	<input type="checkbox"/> Mute Members
<input type="checkbox"/> Manage Roles	<input type="checkbox"/> Send TTS Messages	<input type="checkbox"/> Deafen Members
<input type="checkbox"/> Manage Channels	<input checked="" type="checkbox"/> Manage Messages	<input type="checkbox"/> Move Members
<input type="checkbox"/> Kick Members	<input type="checkbox"/> Manage Threads	<input type="checkbox"/> Use Voice Activity
<input type="checkbox"/> Ban Members	<input checked="" type="checkbox"/> Embed Links	<input type="checkbox"/> Priority Speaker
<input type="checkbox"/> Create Instant Invite	<input checked="" type="checkbox"/> Attach Files	
<input type="checkbox"/> Change Nickname	<input checked="" type="checkbox"/> Read Message History	
<input type="checkbox"/> Manage Nicknames	<input type="checkbox"/> Mention Everyone	
<input type="checkbox"/> Manage Emojis and Stickers	<input type="checkbox"/> Use External Emojis	
<input type="checkbox"/> Manage Webhooks	<input type="checkbox"/> Use External Stickers	
<input checked="" type="checkbox"/> Read Messages/View Channels	<input checked="" type="checkbox"/> Add Reactions	
<input type="checkbox"/> Manage Events	<input type="checkbox"/> Use Slash Commands	



Output example:



Exercise 02: Turn the bot online

	Difficulty:	★ ★
	Objectives:	Enable your bot to be online and output on your console the name of your bot using <i>on_ready</i>
	Skills required:	<ul style="list-style-type: none">➤ Quickstart Documentation Knowledge➤ Basic understanding of console output.
	Resources:	<ul style="list-style-type: none">➤ Discord Bot Quickstart➤ What is the "on_ready()" function ?➤ What is an event decorator?
	Search keywords:	<ul style="list-style-type: none">➤ discord py documentation➤ discord py on ready print console
	Command required:	[The bot name can be any name you want]

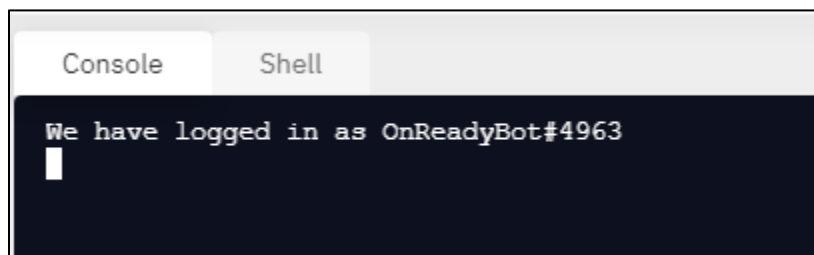
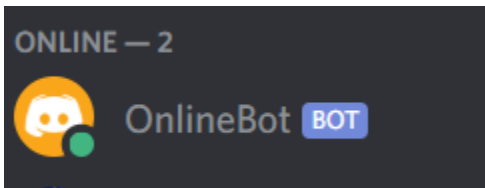


Code snippet:







```
import discord
```



Output example:



Exercise 03: Token Encapsulation

	Difficulty:	★ ★
	Objectives:	Encapsulate your bot's token in 'secrets'. Ensure that the actual token's value is NOT on main.py but inside secrets.
	Skills required:	Basic repl.it bot security measures
	Resources:	<ul style="list-style-type: none">➤ What are secrets and environment variables?➤ Example usage of secrets
	Search keywords:	storing secrets in replit (.env)
	Command required:	N/A



Code snippet:

```
import discord
import os

. . .







client.run(os.getenv("TOKEN"))
```



Output example:



Exercise 04: Responding to user inputs

	Difficulty:	★ ★ ★
	Objectives:	The bot should reply to the text "\$hello" when inputted by a user other than itself.
	Skills required:	Enabling simple bot commands
	Resources:	Discord Bot Quickstart
	Search keywords:	discord py on message
	Command required:	\$hello



Code snippet:

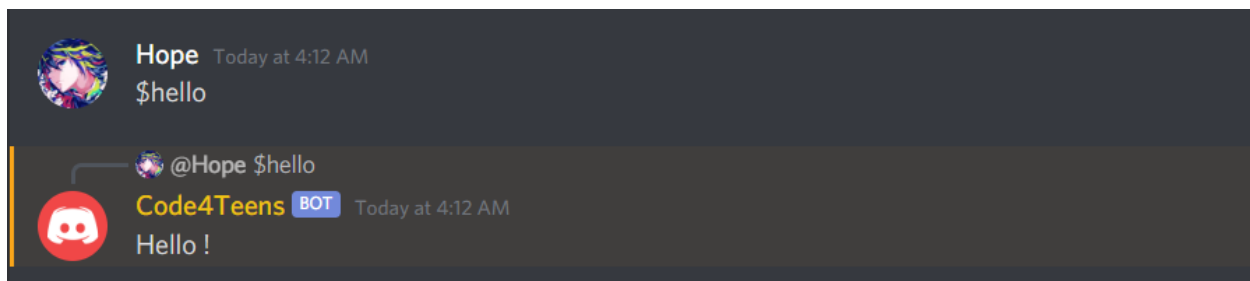
```
import discord

...







await message.channel.send('Message')
```



Output example:



Exercise 05: Greeting the user

	Difficulty:	★ ★ ★
	Objectives:	The bot should reply to the text "\$greet" by greeting the author of the message by their username.
	Skills required:	Formatting messages using `author.name`
	Resources:	<ul style="list-style-type: none">➤ What is 'author'?➤ What are the possible 'author' parameters?
	Search keywords:	get message author discord py
	Command required:	\$greet



Code snippet:

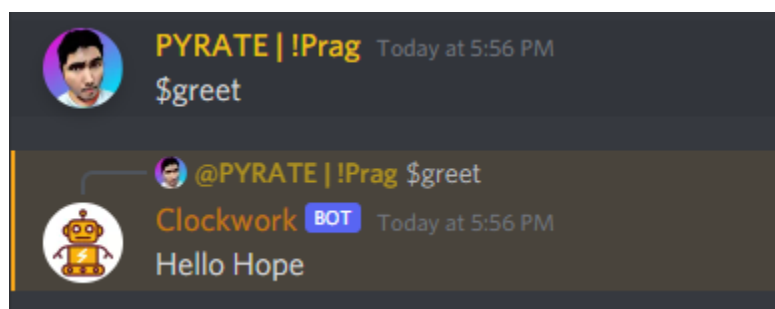
```
import discord

...

... {message.author.name}
```









Output example:



🚩 Bonus 01: Greeting the user by their NICKNAME

!! This is a BONUS question.

	Difficulty:	★ ★ ★
	Objectives:	The bot should reply to the text "\$greet" by greeting the author of the message by their NICKNAME
	Skills required:	Retrieving value of attribute from an object
	Resources:	Discord.py Documentation
	Search keywords:	get message author discord py
	Command required:	\$greetings

 Code snippet:

```
import discord
...
... {Fill in the blank}
```

✅ Output example:

