




# Python Discord Bot






DAY 02

Introduction to Python (ii)

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## Exercise 01: Speedy

	Difficulty:	★
	Objectives:	Fill in code to check if speed is more than 60. If so, display a message saying “over the speed limit!”
	Skills required:	Using conditionals
	Resources:	<a href="#">Python If ... Else</a>
	Search keywords:	Python if statements



Code snippet:






```
speed = 61
print(speed)
[your code
here...]
```



Output example:

Console	Shell
<pre>61 over the speed limit! &gt; </pre>	

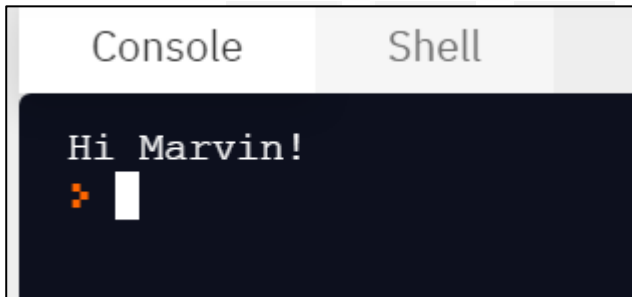
## Exercise 02: Say hi

	Difficulty:	★ ★
	Objectives:	Create a function called my_function that displays “Hi Marvin!”
	Skills required:	Using functions
	Resources:	<a href="#">Python Functions</a>
	Search keywords:	Functions in python

### Code snippet:






```
[your code  
here..]  
my_function()
```

### Output example:



The screenshot shows a terminal window with two tabs: 'Console' and 'Shell'. The 'Console' tab is active, and it displays the text 'Hi Marvin!' in a monospaced font. Below the text is a prompt character, a small orange square, followed by a white cursor bar.

## Exercise 03: Say hi 2.0

	Difficulty:	★ ★ ★
	Objectives:	Create a function called <code>say_hi</code> , which returns a string that greets a user by using the argument passed.
	Skills required:	<ul style="list-style-type: none"><li>➤ Using arguments in functions</li><li>➤ Return statements</li></ul>
	Resources:	<a href="#">Python Functions</a>
	Search keywords:	<ul style="list-style-type: none"><li>➤ Function arguments python</li><li>➤ Return statements python</li></ul>



### Code snippet:






```
[your code  
here...]  
say_hi("Marvin")  
say_hi("Ben")
```



### Output example:

Console	Shell
<pre>Greetings Marvin! Greetings Ben! ➤ █</pre>	

## Exercise 04: Calculate

	Difficulty:	★ ★ ★
	Objectives:	Create a function that performs mathematical operations such as multiplication, division, addition and subtraction (* / + -) on two numbers passed as arguments and returns the result. Function should accept 3 arguments which are: <ul style="list-style-type: none"><li>i. number1</li><li>ii. operator</li><li>iii. number2</li></ul>
	Skills required:	<ul style="list-style-type: none"><li>➤ Utilising function and arguments</li><li>➤ Utilising conditionals</li><li>➤ Utilising return statements</li></ul>
	Resources:	<a href="#">Python return statement</a>
	Search keywords:	<ul style="list-style-type: none"><li>➤ Functions in python</li><li>➤ Arguments in function python</li></ul>




### Code snippet:






```
[your code  
here...]  
print(calculate(10,"+",10))  
print(calculate(10,"-",10))  
print(calculate(10,"*",10))  
print(calculate(10,"/",10))
```



### Output example:

Console	Shell
20 0 100 1.0 	

## Exercise 05: The what?

	Difficulty:	★ ★
	Objectives:	Given 3 strings, create a function called <code>check_string</code> that returns "Yes!" if the string starts with the letters "The" and returns "No!" otherwise.
	Skills required:	<ul style="list-style-type: none"><li>➤ Using the python in-built library</li><li>➤ Utilising functions</li><li>➤ Utilising return statements</li></ul>
	Resources:	<ul style="list-style-type: none"><li>➤ <a href="#">Python Built in Functions</a></li></ul>
	Search keywords:	<ul style="list-style-type: none"><li>➤ Python in-built functions</li><li>➤ Return statements in</li></ul>



### Code snippet:






```
[your code
here...]
str1 = 'The'
str2 = 'Thumbs up'
str3 = 'Theatre can be boring'
print(check_string(str1))
print(check_string(str2))
print(check_string(str3))
```



### Output example:

Console	Shell
Yes! No! Yes! ❖ □	

## Exercise 06: Loop de loop

	Difficulty:	★ ★
	Objectives:	Write code into the specified place to increase the variable count by 1 and print it every time the loop runs as long as it is less than 5
	Skills required:	Using while loops
	Resources:	<a href="#">Python While Loops</a>
	Search keywords:	While loops in python





### Code snippet:

```
count = 0
while [your code here]:
    [your code here]
    [your code here]
```








### Output example:

Console	Shell
1	
2	
3	
4	
5	
	



## Exercise 07: Loop de list

	Difficulty:	★ ★ ★ ★
	Objectives:	Loop through the list and achieve the below output by filling in the code
	Skills required:	Using for loops
	Resources:	<a href="#">Python For Loops</a>
	Search keywords:	For loops in python



### Code snippet:






```
countries = ['Malaysia','Japan','Armenia','Brazil','Australia']  
for [your code here]:  
    [your code here]
```



### Output example:

Console	Shell
<pre>Come and visit Malaysia Come and visit Japan Come and visit Armenia Come and visit Brazil Come and visit Australia ❖ □</pre>	

## Exercise 08: Random

	Difficulty:	★ ★ ★ ★
	Objectives:	<ul style="list-style-type: none"><li>➤ Use the random module to randomly pick an item from a list</li><li>➤ Use the random module to display a random number from 0 to 100</li></ul>
	Skills required:	Using the random module
	Resources:	<a href="#">Python Random Module</a>
	Search keywords:	Random module python

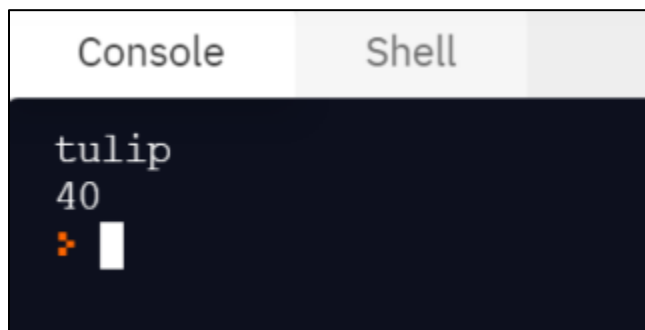


### Code snippet:

```
import random
flowers = ['rose', 'tulip', 'lily']
print([your code here])
print([your code here])
```








### Output example:



*\*Note: This is a random output, your output may differ*

!! This is a BONUS question.

## 🚩 Bonus 01: What time is it?

	Difficulty:	★ ★ ★
	Objectives:	<ul style="list-style-type: none"><li>➤ Use the datetime module to find out the current time.</li><li>➤ Use the pytz module to set a timezone</li></ul>
	Skills required:	<ul style="list-style-type: none"><li>➤ Using the datetime module.</li><li>➤ Using the pytz module</li></ul>
	Resources:	<ul style="list-style-type: none"><li>➤ <a href="#">Python Get Current time</a></li><li>➤ <a href="#">List of pytz time zones</a></li></ul>
	Search keywords:	<ul style="list-style-type: none"><li>➤ Datetime module python</li><li>➤ Pytz module python</li></ul>



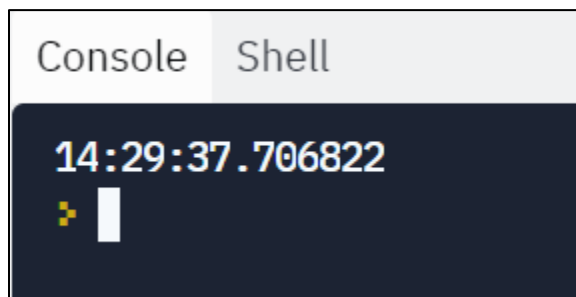
Code snippet:

```
from datetime import datetime
import pytz

local_timezone = pytz...
local_time = datetime...
print(local_time.time())
```



Output example:



*\*Note: Your output may differ*