



# Python Discord Bot






DAY 01

Introduction to Python

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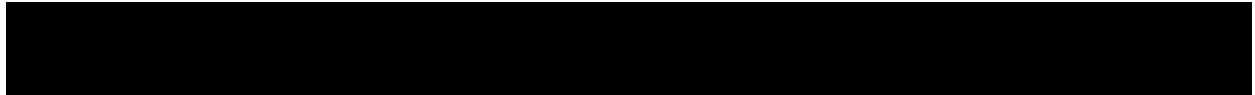
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## Exercise 01: First Steps

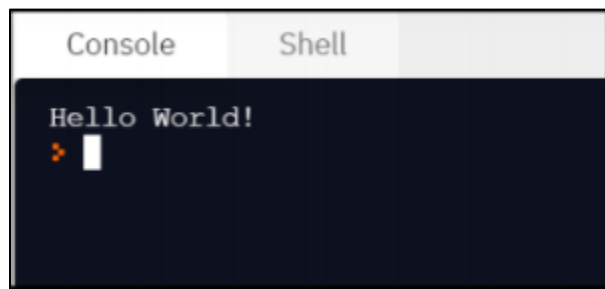
	Difficulty:	★
	Objectives:	Figure out how to display “Hello World” in your console.
	Skills required:	<ul style="list-style-type: none"><li>Using strings</li><li>Using built-in python functions</li></ul>
	Resources:	
	Search keywords:	<ul style="list-style-type: none"><li>python syntax</li><li>strings</li></ul>










**Code snippet:**



**Output example:**



## Exercise 02: Variables

	Difficulty:	★ ★
	Objectives:	Set variable <b>text</b> to a string that displays the same output as below.
	Skills required:	 Using variables
	Resources:	
	Search keywords:	 Variables in python

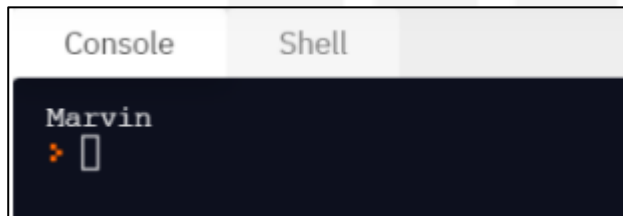


Code snippet:









```
text = [your code here]
print(text)
```



Output example:



## Exercise 03: Lower, Upper, Nospace

	Difficulty:	★ ★ ★
	Objectives:	Using <b>string1</b> , which is set to 'MaRviN THE bOt', create <b>3</b> more variables and manipulate them to achieve the same output as below.  You are <b>not allowed</b> to use quotation marks "" or single quotes '' to <b>create</b> the 3 variables.
	Skills required:	 Using in-built python functions  Manipulating strings
	Resources:	<a href="#">Python String Methods</a>
	Search keywords:	 String manipulation python



Code snippet:






```
string1 = 'MaRviN THE bOt'  
string1lowercase = [your code here]  
string1uppercase = [your code here]  
string1nospace = [your code here]  
print(string1lowercase)  
print(string1uppercase)  
print(string1nospace)
```



Output example:

Console	Shell
<pre>marvin the bot MARVIN THE BOT MaRviNTHEbOt ➤ █</pre>	

## Exercise 04: Data Types

	Difficulty:	★ ★ ★
	Objectives:	Write code to display the <b>exact</b> same output as below
	Skills required:	Type conversion/Type casting
	Resources:	<a href="#">Python Casting</a>
	Search keywords:	Convert data types in python

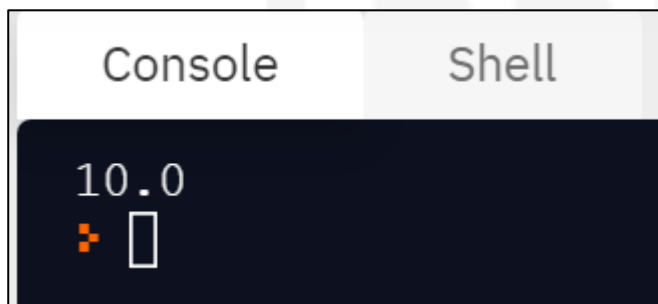


### Code snippet:






```
num1 = "50"  
num2 = "5"  
[your code here]  
[your code here]  
print(num1/num2)
```



### Output example:



## Exercise 05: Concatenation

	Difficulty:	★ ★
	Objectives:	Fill in the code to display the exact same output as below
	Skills required:	String concatenation
	Resources:	<a href="#">Python String Concatenation</a>
	Search keywords:	Concatenation in python

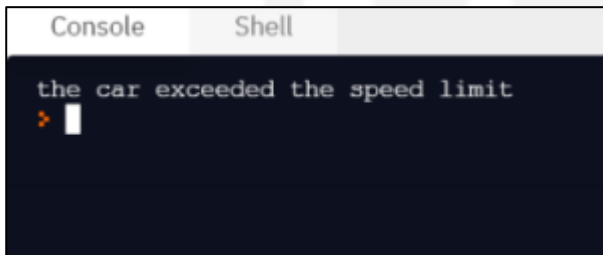


### Code snippet:

```
word1 = 'car '  
word2 = 'exceeded '  
text1 = 'speed limit'  
word3 = 'the '  
[your code here]
```








### Output example:



```
the car exceeded the speed limit  
➤
```

## Exercise 06: Lists

	Difficulty:	★ ★ ★ ★
	Objectives:	Fill in the code to display the exact same output as below
	Skills required:	<ul style="list-style-type: none"><li>Using lists</li><li>List manipulation</li><li>List slicing</li></ul>
	Resources:	<a href="#">Python List</a>
	Search keywords:	List manipulation



### Code snippet:

```
names = ['Tom', 'Jerry', 'Butch', 'Tuffy', 'Pecos']  
[your code here  
...]
```



















### Output example:

```
Console  Shell  
['Tom', 'Jerry', 'Butch', 'Tuffy', 'Pecos']  
Tom  
Pecos  
['Butch', 'Tuffy']  
➤ []
```



## Exercise 07: Dictionaries

	Difficulty:	    
	Objectives:	Using the given dictionary <b>age</b> 1) Display the whole dictionary 2) Display age of 'Hans' 3) Change age of 'Prag' to 30 4) Display age of 'Prag' 5) Delete key-value pair of 'Bunyod' 6) Display the whole dictionary
	Skills required:	 Using dictionaries  Manipulating dictionaries  Deleting key-value pairs
	Resources:	Google.com
	Search keywords:	 Python dictionaries  Change value of key in dictionary  Deleting a key-value pair in a dictionary



### Code snippet:

```
age = {'Hans':24, 'Prag':23, 'Bunyod':18}  
[your code here  
...]
```








### Output example:

Console	Shell
<pre>{'Hans': 24, 'Prag': 23, 'Bunyod': 18} 24 30 {'Hans': 24, 'Prag': 30} ➤</pre>	

## Bonus 01: More string interpolation

**!!** This is a BONUS question.

	Difficulty:	★ ★
	Objectives:	Use a method of string interpolation to insert variables into a predefined text.  Fill in the code to achieve the same output
	Skills required:	? String interpolation
	Resources:	<a href="#">Python String format()</a>
	Search keywords:	? Python string interpolation ? Python string format

### Code snippet:

```
name = "Sam"
dog = "Scooby"
shoes = 10

print(f"...")
```

### Output example:

Console Shell

```
Sam's dog Scooby ate 10 pairs of shoes.
```