

# Python Programming

## Syntax Errors

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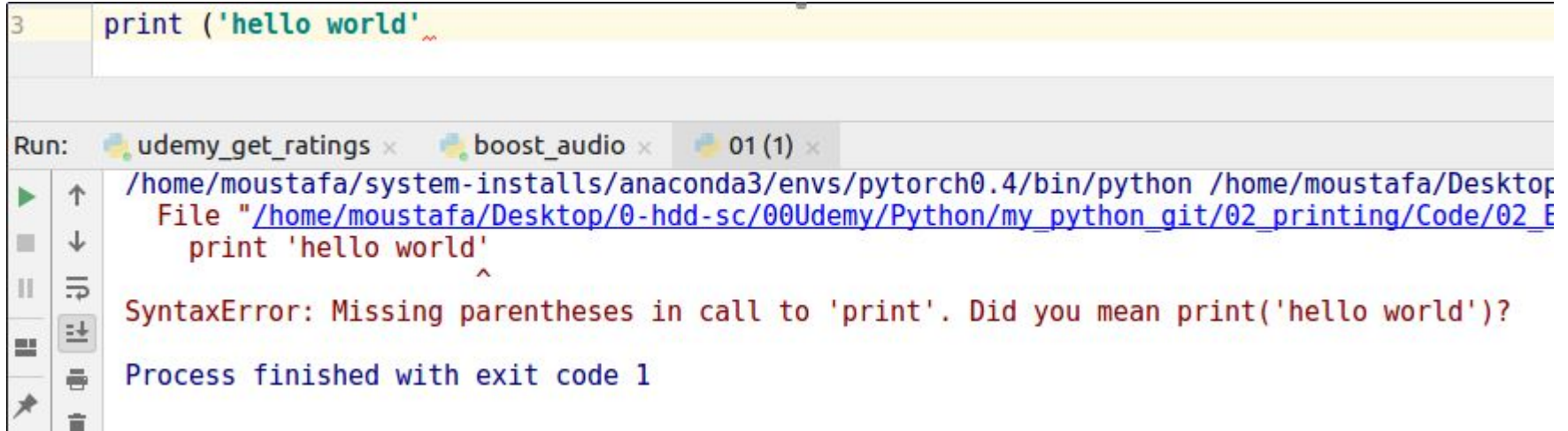
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# Don't forget ()



The screenshot shows a code editor with a single line of Python code: `print ('hello world'`. The code is on line 3, and there is a red squiggly line under the opening single quote, indicating a syntax error. Below the code editor, the output window shows the command used to run the code: `/home/moustafa/system-installs/anaconda3/envs/pytorch0.4/bin/python /home/moustafa/Desktop/0-hdd-sc/00Udemy/Python/my_python_git/02_printing/Code/02_E`. The output window also shows the file path: `File "/home/moustafa/Desktop/0-hdd-sc/00Udemy/Python/my_python_git/02_printing/Code/02_E`. The error message is: `SyntaxError: Missing parentheses in call to 'print'. Did you mean print('hello world')?`. The process finished with exit code 1.

```
3 print ('hello world'
```

Run: ude... boost\_audio x 01 (1) x

`/home/moustafa/system-installs/anaconda3/envs/pytorch0.4/bin/python /home/moustafa/Desktop/0-hdd-sc/00Udemy/Python/my_python_git/02_printing/Code/02_E`

`File "/home/moustafa/Desktop/0-hdd-sc/00Udemy/Python/my_python_git/02_printing/Code/02_E`

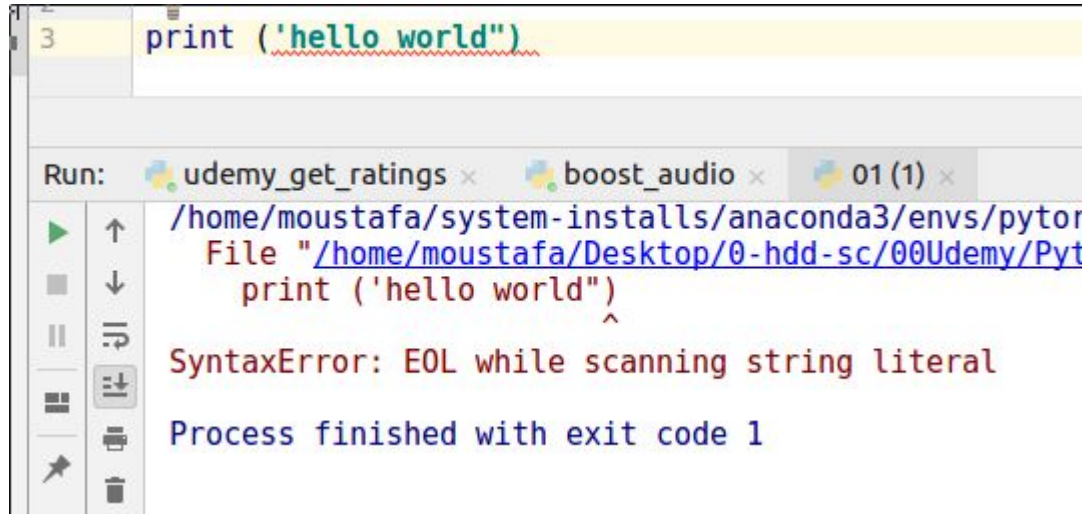
`print 'hello world'`

`SyntaxError: Missing parentheses in call to 'print'. Did you mean print('hello world')?`

`Process finished with exit code 1`

- Observe line 3: Syntax highlighting for a potential mistake
- **Syntax errors:** Python parser is unable to understand a line of code
- Exit code 1  $\Rightarrow$  Did not finish properly

Each string start/end: either 'xxx' or "xxx" not "xxx:'

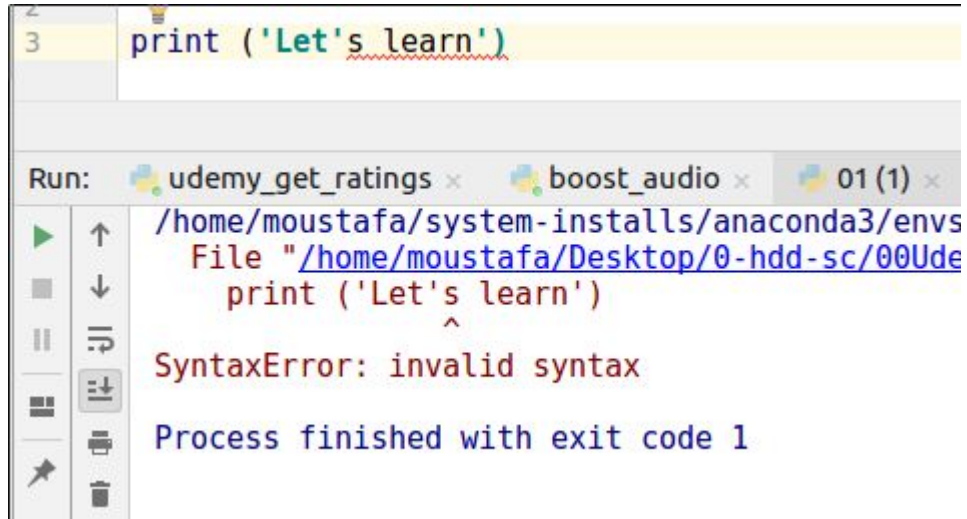


```
3 print ('hello world")
```

Run: udeemy\_get\_ratings × boost\_audio × 01 (1) ×

/home/moustafa/system-installs/anaconda3/envs/pytor  
File ["/home/moustafa/Desktop/0-hdd-sc/00Udemy/Pyt](#)  
print ('hello world")  
^  
SyntaxError: EOL while scanning string literal  
Process finished with exit code 1

# Printing ‘



The screenshot shows a code editor with a single line of Python code: `print ('Let's learn')`. The string is enclosed in single quotes, and the apostrophe in "Let's" is not escaped. Below the code editor, a terminal window displays the error message: `SyntaxError: invalid syntax`. The error message is preceded by the file path: `File "/home/moustafa/Desktop/0-hdd-sc/00Ude`. The terminal also shows the command prompt `Run:` and the command `01 (1) x`.

```
2  
3 print ('Let's learn')  
  
Run: udey_get_ratings x boost_audio x 01 (1) x  
/home/moustafa/system-installs/anaconda3/envs  
File "/home/moustafa/Desktop/0-hdd-sc/00Ude  
print ('Let's learn')  
^  
SyntaxError: invalid syntax  
Process finished with exit code 1
```

- This is tricky!
- We wanna print ‘
- But if we added it, python sees 3 single quotes! So how to solve!

# Handling the issue

- We can utilize “ for printing ‘ and the opposite
- Or use \’ and \” [not great choice]

```
3 print ('Let\'s learn') # use escape char \' ..hmm
4 print ("let's learn") # make use of ""
5
6 print ("Same for using \" in between")
7 print ('Same for using " in between')
8
9 """
10 Let's learn
11 let's learn
12 Same for using " in between
13 Same for using " in between
14 """
15
```

# Case Sensitive!



The screenshot shows a code editor with a single line of Python code on line 3: `Print ('hello')`. The word `Print` is underlined with a red squiggly line, indicating an error. Below the code editor is a terminal window titled "Run:" with three tabs: "udemy\_get\_ratings", "boost\_audio", and "01 (1)". The terminal output shows the following traceback:

```
/home/moustafa/system-installs/anaconda3/envs/
Traceback (most recent call last):
  File "/home/moustafa/Desktop/0-hdd-sc/00Ude
    Print ('hello')
NameError: name 'Print' is not defined

Process finished with exit code 1
```

The error message "NameError: name 'Print' is not defined" is displayed in red text, indicating that the Python interpreter is case-sensitive and does not recognize `Print` as a built-in function.

# Handling errors

- We all make errors
- Tip #1:
  - Code line by line.
  - Run and make sure no errors or solve them
- Tip #2:
  - Google is your friend
  - Stackoverflow is a great site!

*“Acquire knowledge and impart it to the people.”*

*“Seek knowledge from the Cradle to the Grave.”*