

Python - IDLE

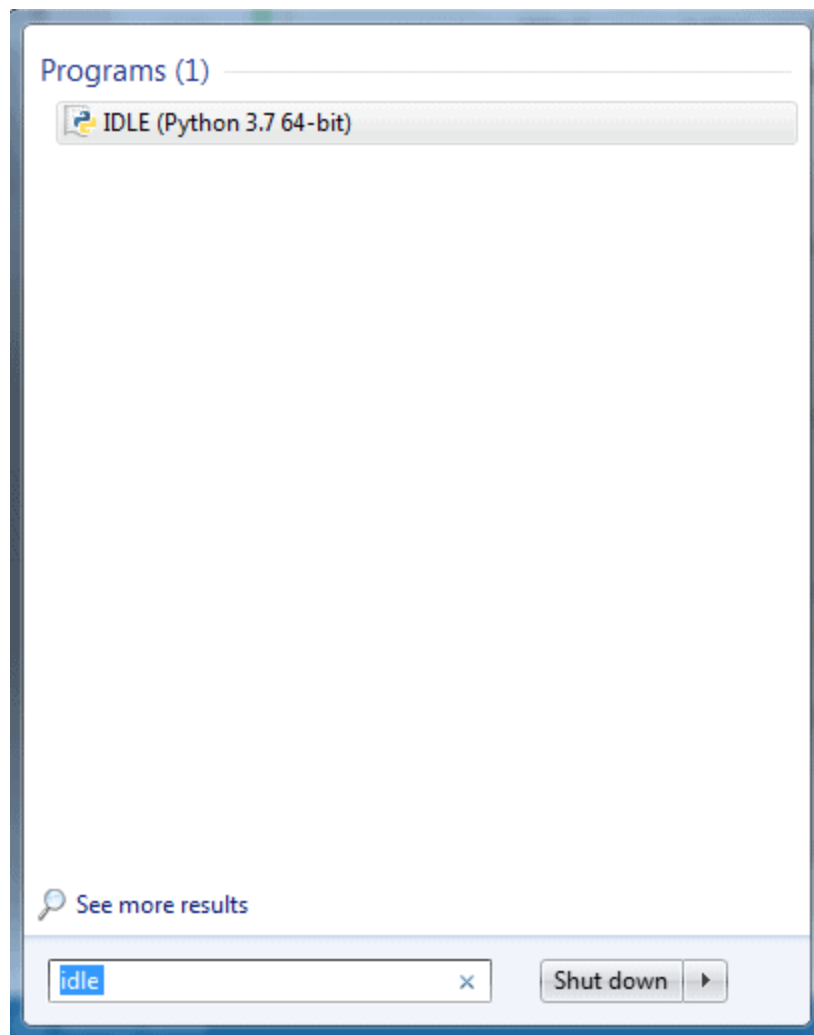
IDLE (Integrated Development and Learning Environment) is an integrated development environment (IDE) for Python. The Python installer for Windows contains the IDLE module by default.

IDLE is not available by default in Python distributions for Linux. It needs to be installed using the respective package managers. For example, in case of Ubuntu:

```
$ sudo apt-get install idle
```

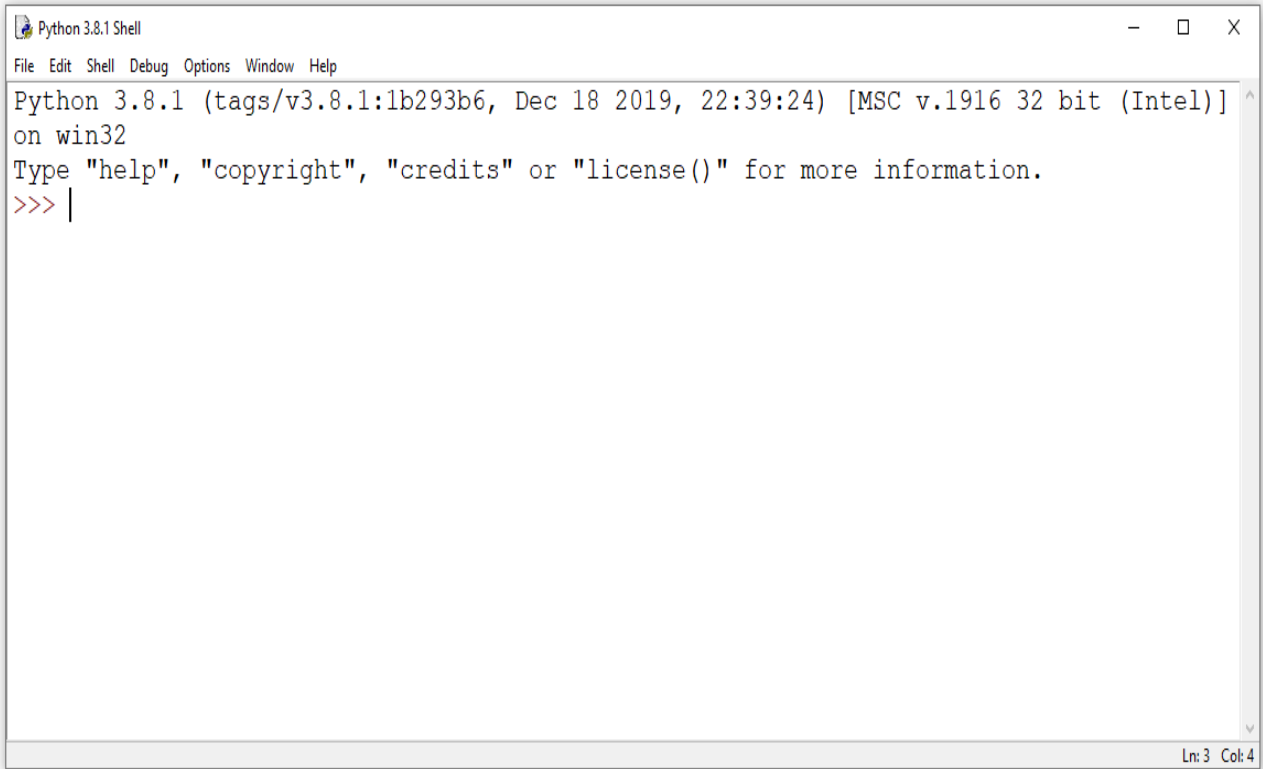
IDLE can be used to execute a single statement just like Python Shell and also to create, modify and execute Python scripts. IDLE provides a fully-featured text editor to create Python scripts that includes features like syntax highlighting, autocompletion and smart indent. It also has a debugger with stepping and breakpoints features.

To start IDLE interactive shell, search for the IDLE icon in the start menu and double click on it.



Python IDLE

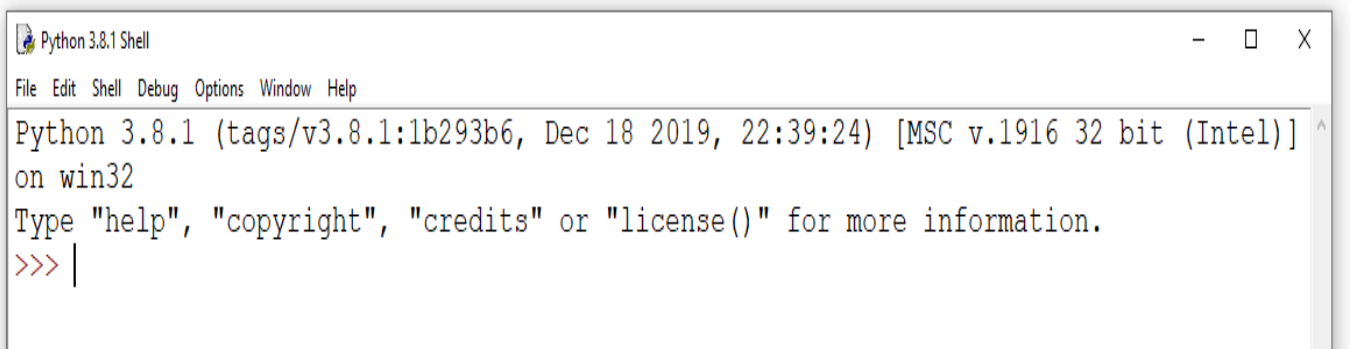
This will open IDLE, where you can write Python code and execute it as shown below.

A screenshot of a Windows application window titled "Python 3.8.1 Shell". The window has a standard menu bar with "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area displays the following text: "Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v.1916 32 bit (Intel)] on win32", followed by "Type 'help', 'copyright', 'credits' or 'license()' for more information.", and then a red prompt ">>>" followed by a vertical cursor bar. The status bar at the bottom right shows "Ln: 3 Col: 4".

```
Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v.1916 32 bit (Intel)]
on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> |
```

Python IDLE

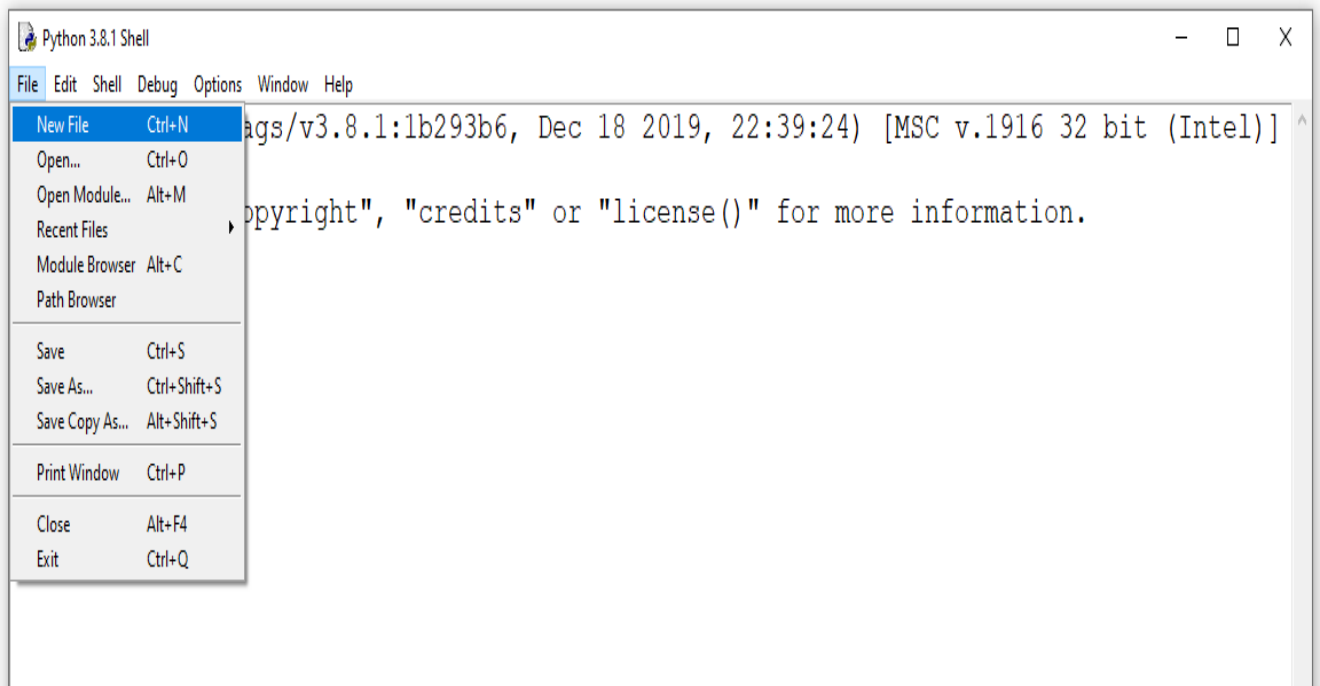
Now, you can execute Python statements same as in Python Shell as shown below.



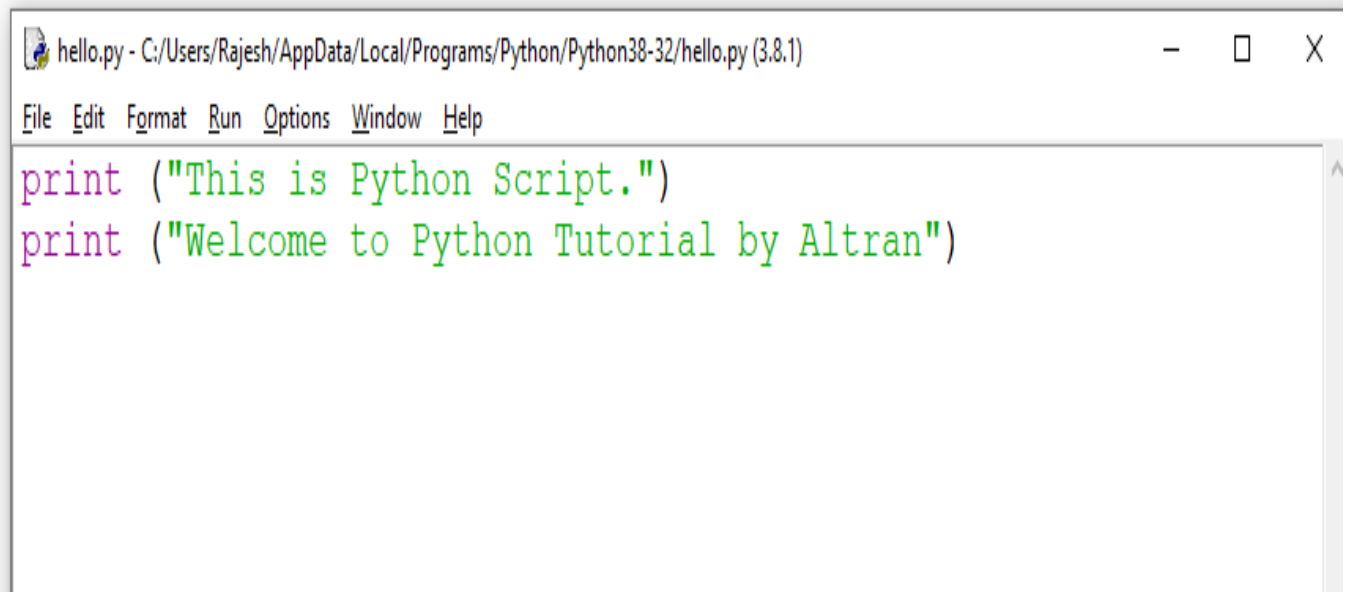
A screenshot of the Python 3.8.1 Shell window. The title bar reads 'Python 3.8.1 Shell'. The menu bar includes 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The main text area displays the following information: 'Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v.1916 32 bit (Intel)] on win32'. Below this, it says 'Type "help", "copyright", "credits" or "license()" for more information.' and the prompt '>>>' followed by a vertical cursor bar.

Python IDLE

To execute a Python script, create a new file by selecting File -> New File from the menu.



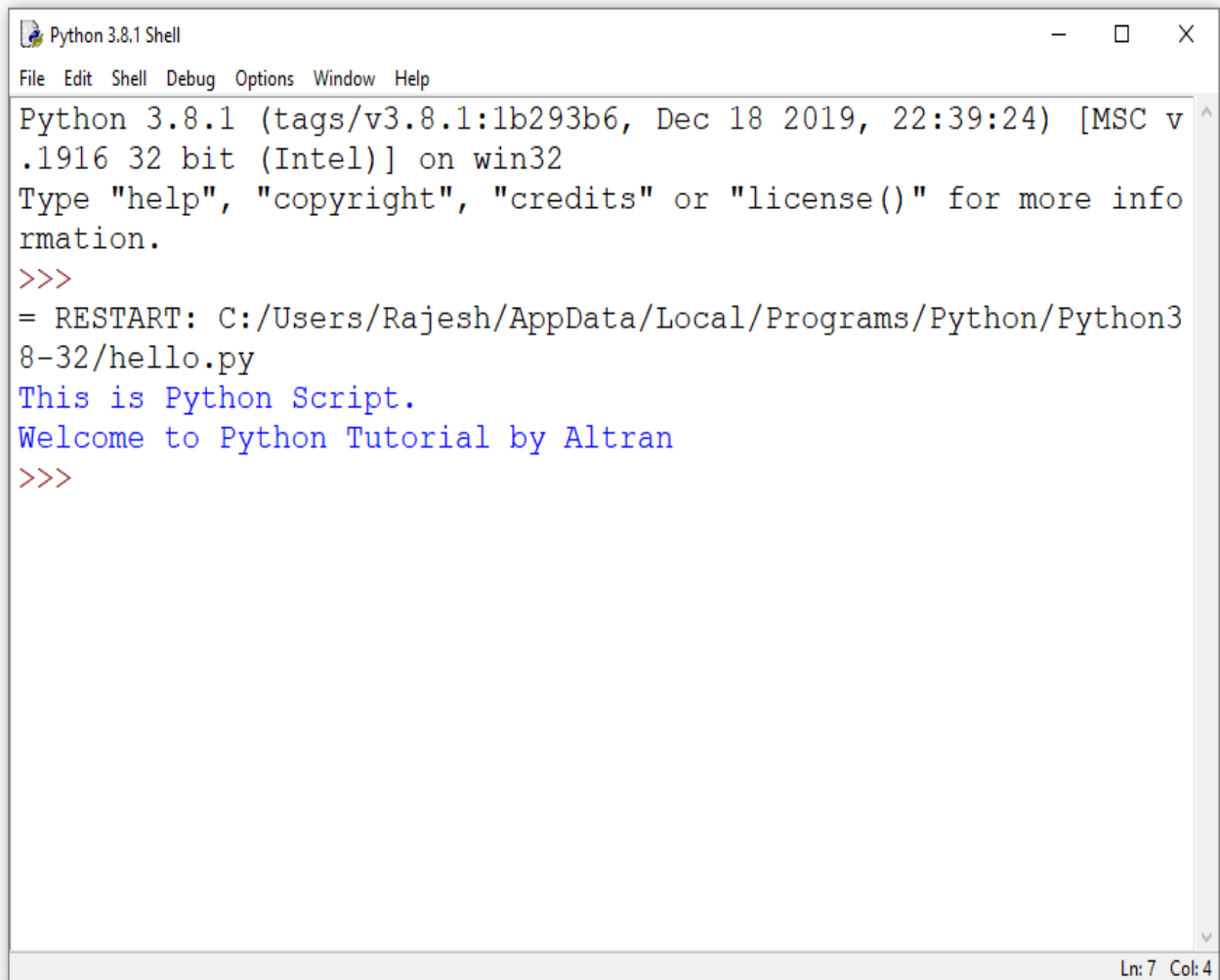
Enter multiple statements and save the file with extension .py using File -> Save. For example, save the following code as hello.py.

A screenshot of the Python IDLE editor window. The title bar at the top reads "hello.py - C:/Users/Rajesh/AppData/Local/Programs/Python/Python38-32/hello.py (3.8.1)". Below the title bar is a menu bar with the following options: File, Edit, Format, Run, Options, Window, and Help. The main text area contains two lines of Python code:

```
print ("This is Python Script.")  
print ("Welcome to Python Tutorial by Altran")
```

Python Script in IDLE

Now, press F5 to run the script in the editor window. The IDLE shell will show the output.

A screenshot of a Python 3.8.1 Shell window. The window has a title bar that says "Python 3.8.1 Shell" and standard window controls (minimize, maximize, close). Below the title bar is a menu bar with "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area shows the following output:

```
Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v
.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more info
rmation.
>>>
= RESTART: C:/Users/Rajesh/AppData/Local/Programs/Python/Python3
8-32/hello.py
This is Python Script.
Welcome to Python Tutorial by Altran
>>>
```

The status bar at the bottom right indicates "Ln: 7 Col: 4".

Python Script Execution Result in IDLE

Thus, it is easy to write, test and run Python scripts in IDLE.