

Python

# Herramientas



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# Entornos de Programación

# Python - Entornos

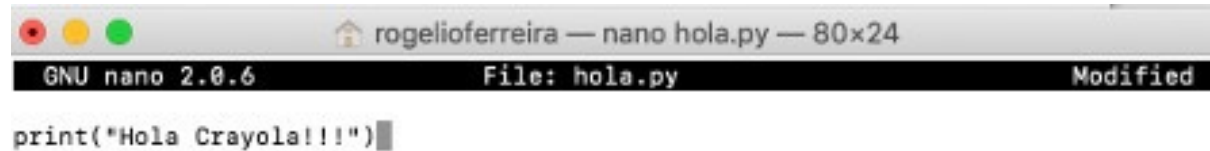
- **Python se puede ejecutar en diferentes entornos:**
  - **Consola.**
  - **Editor de Texto**
  - **IDE.**
  - **Framework.**
  - **Como servidor Web.**
  - **Online.**
  - **En nube.**



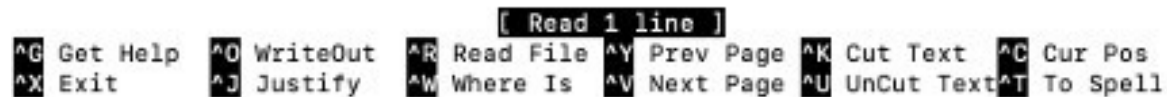
Consola

# Python - Consola

- **> nano hola.py**



```
rogelioferreira — nano hola.py — 80x24
GNU nano 2.0.6 File: hola.py Modified
print("Hola Crayola!!!")
```



```
[ Read 1 line ]
^G Get Help   ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text   ^C Cur Pos
^X Exit       ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text ^T To Spell
```

- **> python hola.py**

**Hola Crayola!!!**



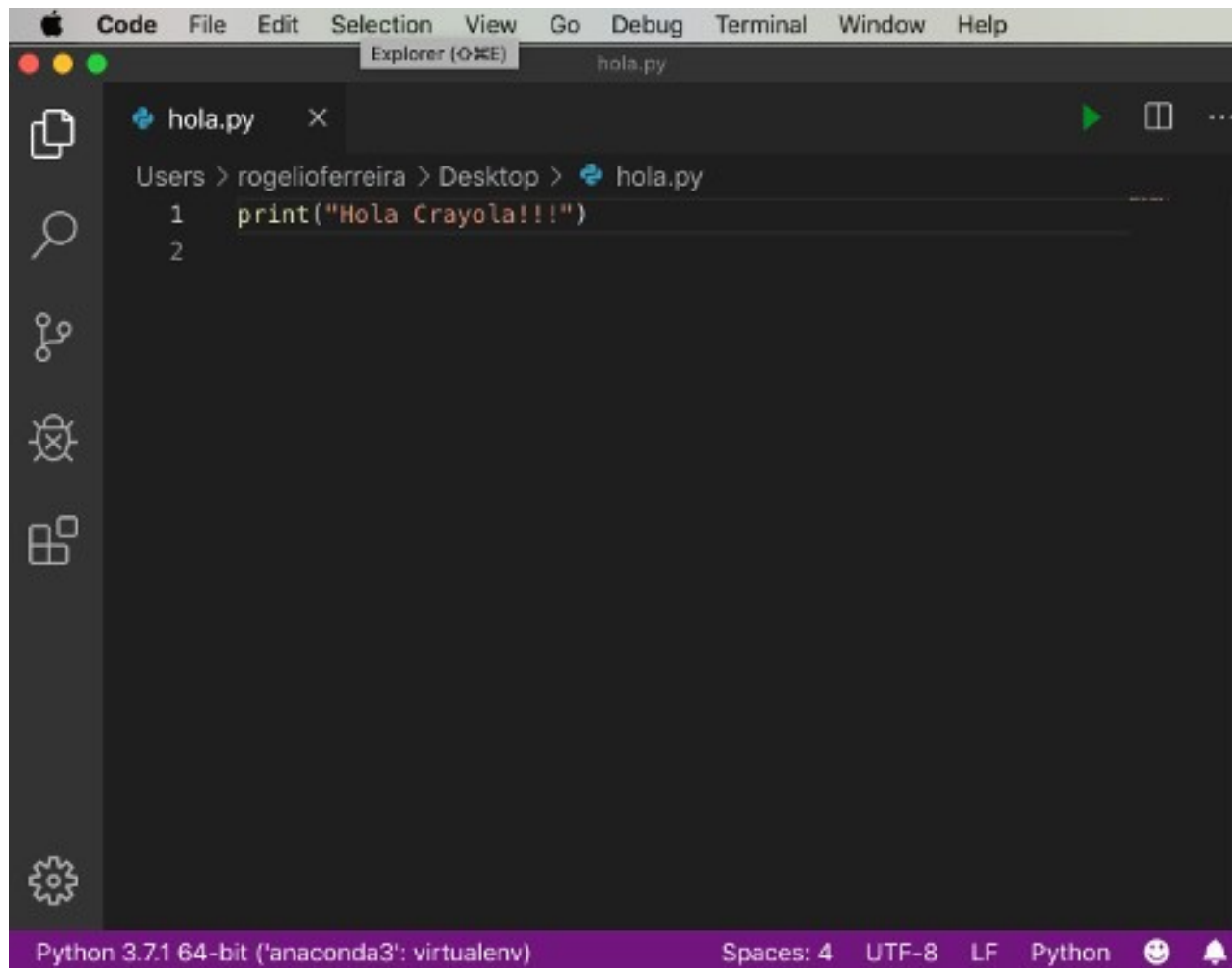
# Editor de Texto

# Python – Editores de Texto

- **Existen varios editores para Python:**
  - **Visual Studio Code**
  - **Brackets.**
  - **Sublime.**



# Python – Visual Studio Code



The screenshot shows the Visual Studio Code interface. The menu bar includes Code, File, Edit, Selection, View, Go, Debug, Terminal, Window, and Help. The Explorer sidebar on the left shows a file named hola.py. The main editor area displays the following code:

```
Users > rogelioferreira > Desktop > hola.py
1 print("Hola Crayola!!!")
2
```

The status bar at the bottom indicates the environment: Python 3.7.1 64-bit ('anaconda3': virtualenv), Spaces: 4, UTF-8, LF, Python.

- **> python hola.py**

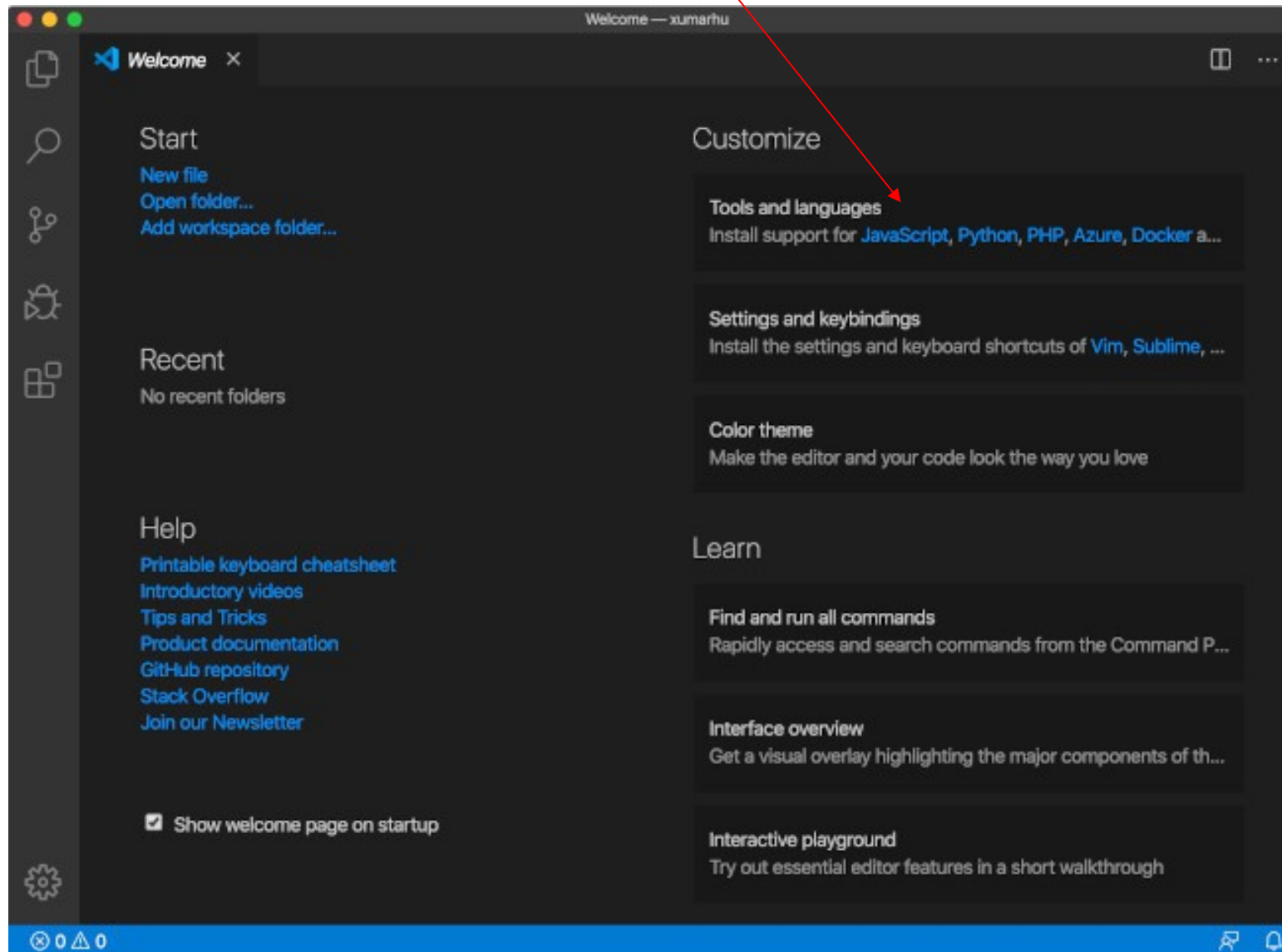
**Hola Crayola!!!**





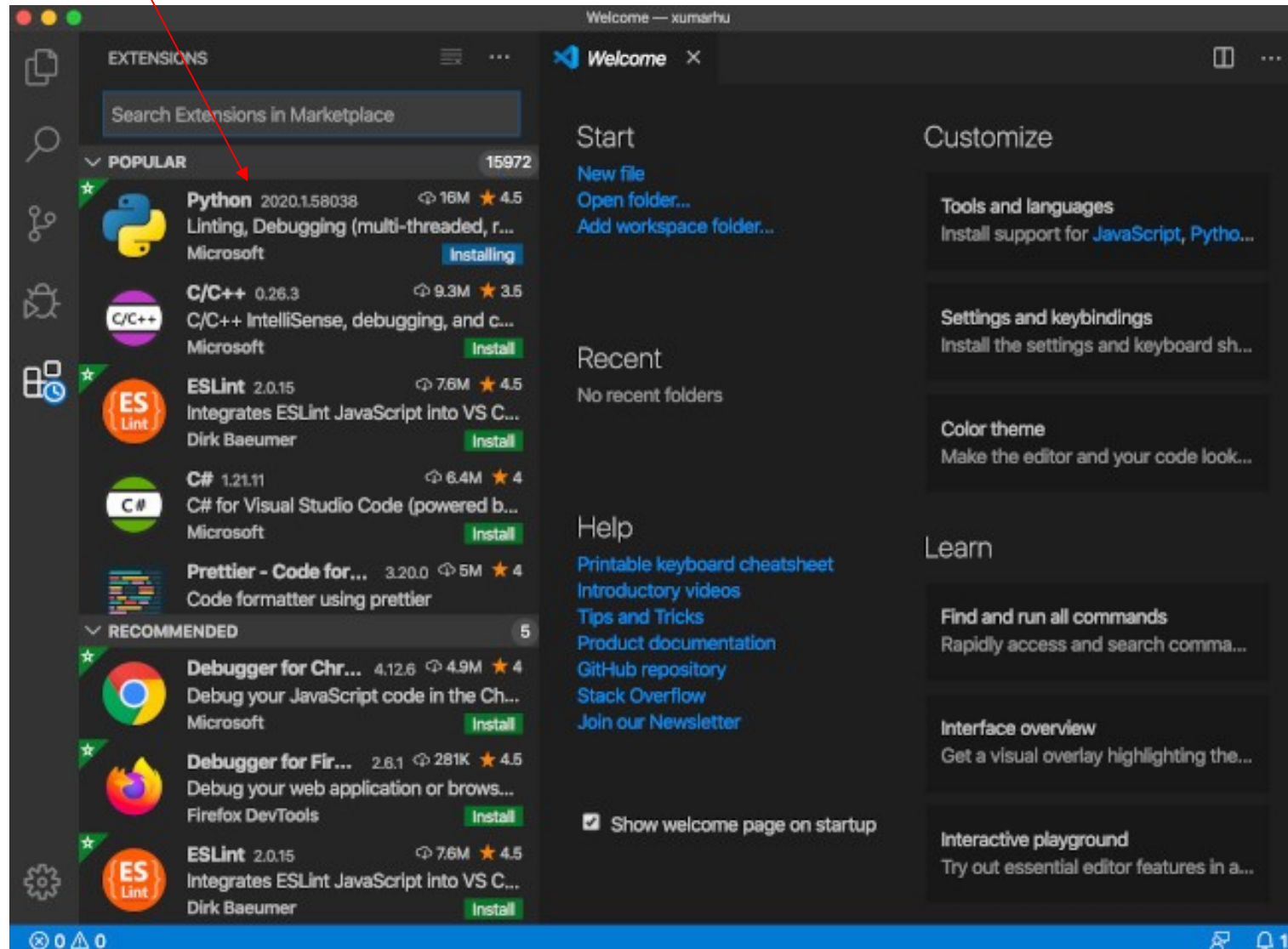
# Visual Studio Code

## ■ Install Support for Python



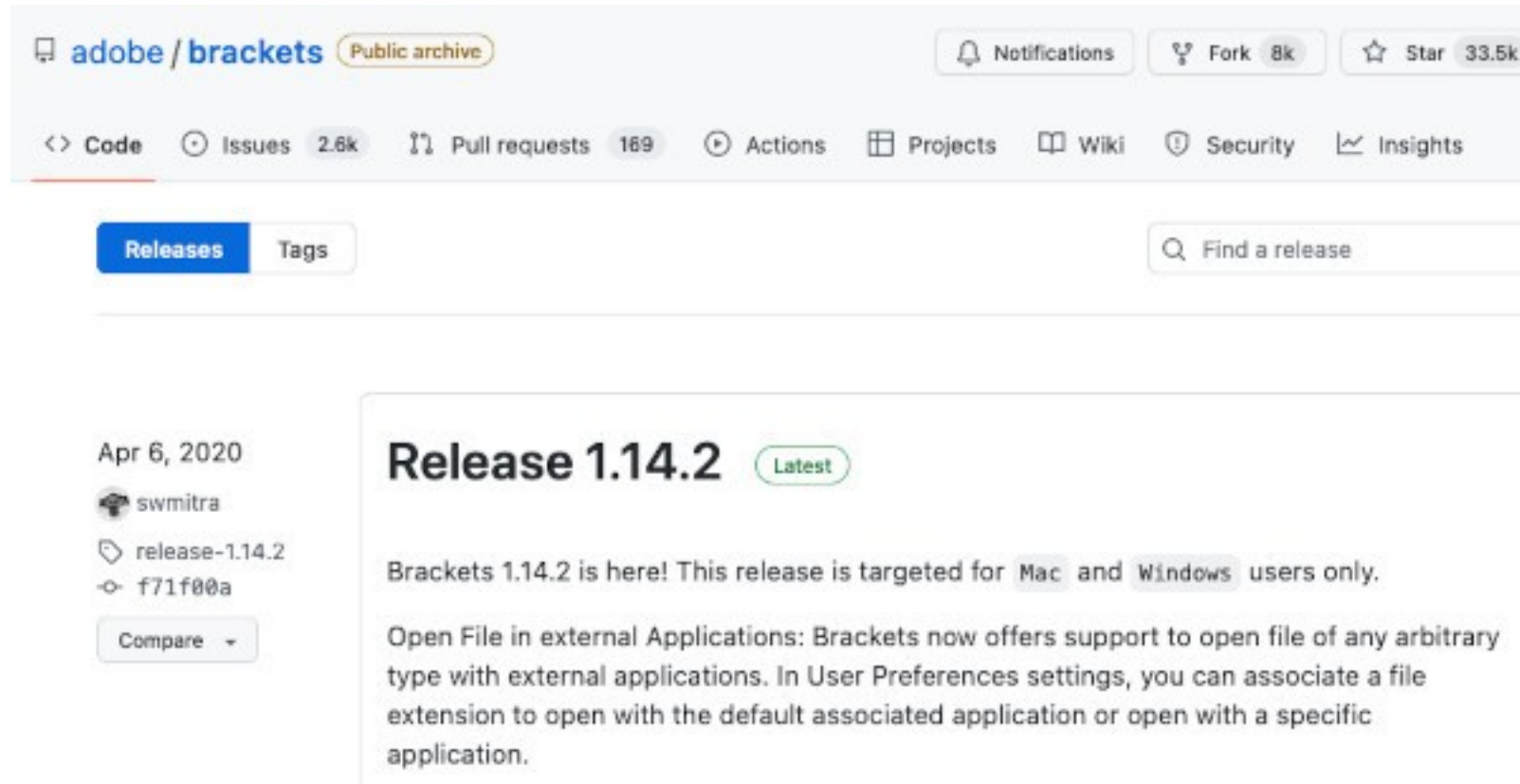
# Visual Studio Code

- Python Microsoft



# Brackets

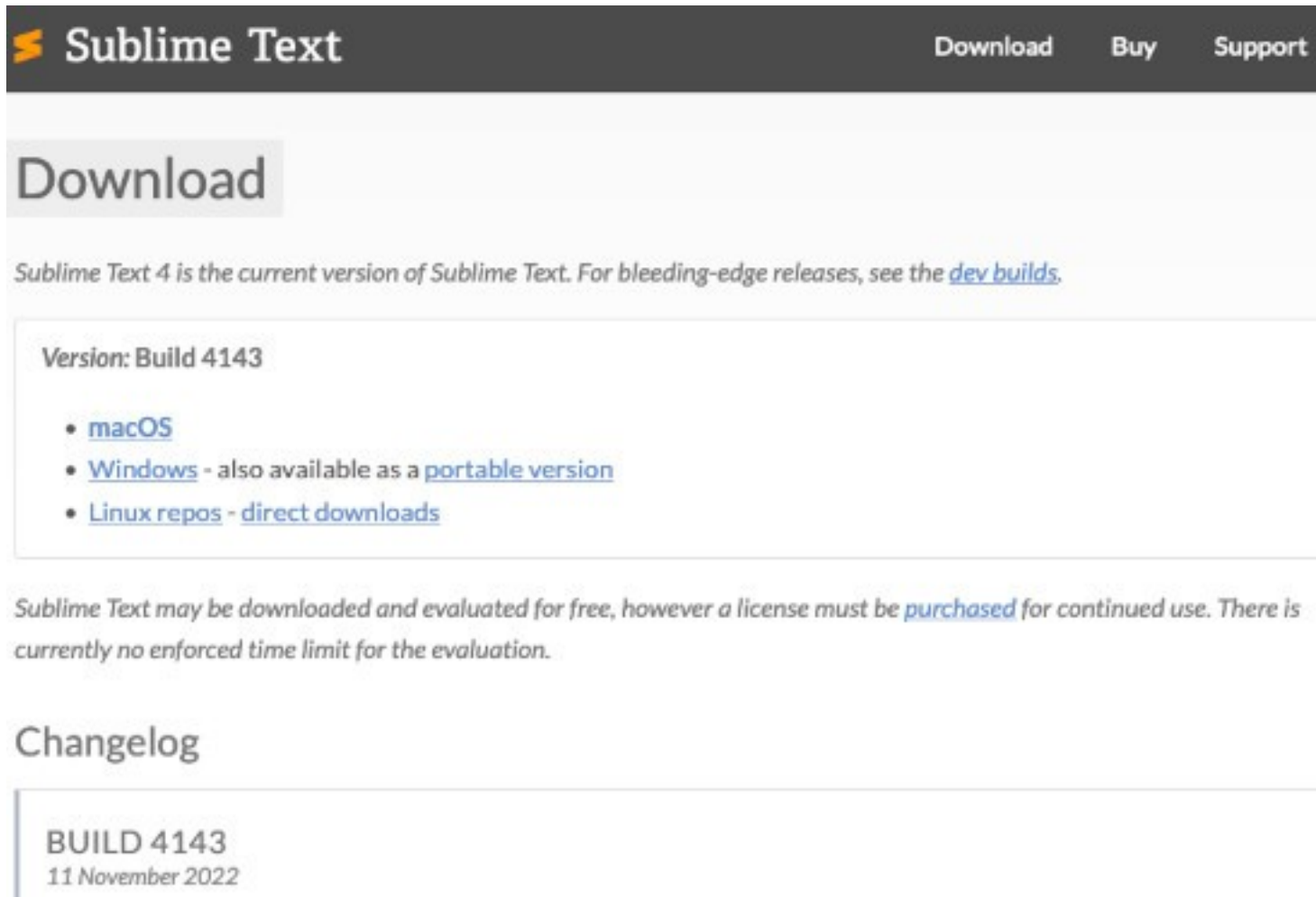
- **Editor de texto:**



The screenshot shows the GitHub interface for the Adobe Brackets repository. At the top, the repository name 'adobe / brackets' is displayed with a 'Public archive' label. Navigation buttons for 'Notifications', 'Fork' (8k), and 'Star' (33.5k) are visible. Below this, a row of navigation links includes 'Code', 'Issues' (2.6k), 'Pull requests' (169), 'Actions', 'Projects', 'Wiki', 'Security', and 'Insights'. The 'Releases' tab is selected, and a search bar for releases is present. The main content area features a release card for 'Release 1.14.2', marked as 'Latest'. The release was published on 'Apr 6, 2020' by user 'swmitra' with commit hash 'f71f00a'. The release text states: 'Brackets 1.14.2 is here! This release is targeted for Mac and Windows users only. Open File in external Applications: Brackets now offers support to open file of any arbitrary type with external applications. In User Preferences settings, you can associate a file extension to open with the default associated application or open with a specific application.'

# Sublime

- Editor de texto:



The screenshot shows the 'Download' page for Sublime Text. At the top, there is a dark navigation bar with the Sublime Text logo and the text 'Sublime Text' on the left, and 'Download', 'Buy', and 'Support' on the right. Below the navigation bar, the word 'Download' is prominently displayed in a large, light gray font. Underneath, a paragraph states: 'Sublime Text 4 is the current version of Sublime Text. For bleeding-edge releases, see the [dev builds](#).' A box contains the text 'Version: Build 4143' followed by a bulleted list of links: 'macOS', 'Windows - also available as a [portable version](#)', and 'Linux repos - [direct downloads](#)'. Below this box, another paragraph reads: 'Sublime Text may be downloaded and evaluated for free, however a license must be [purchased](#) for continued use. There is currently no enforced time limit for the evaluation.' The 'Changelog' section is visible at the bottom, with a vertical line on the left side. The first entry in the changelog is 'BUILD 4143' dated '11 November 2022'.

IDE

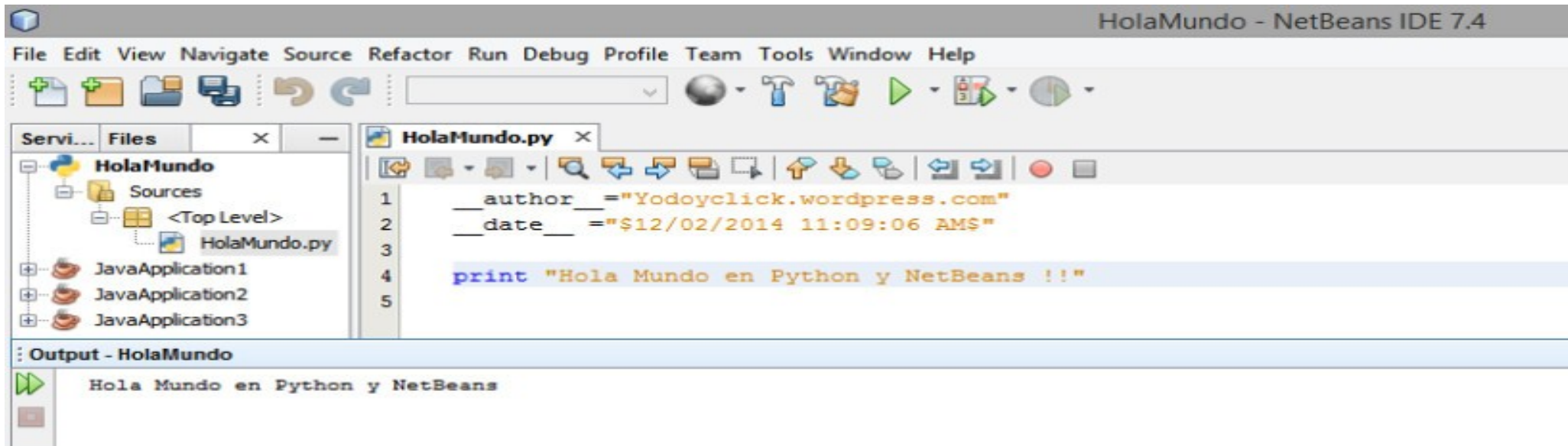
# Python – IDE

- **Existen varios IDE's para Python:**
  - **NetBeans**
  - **Eclipse**



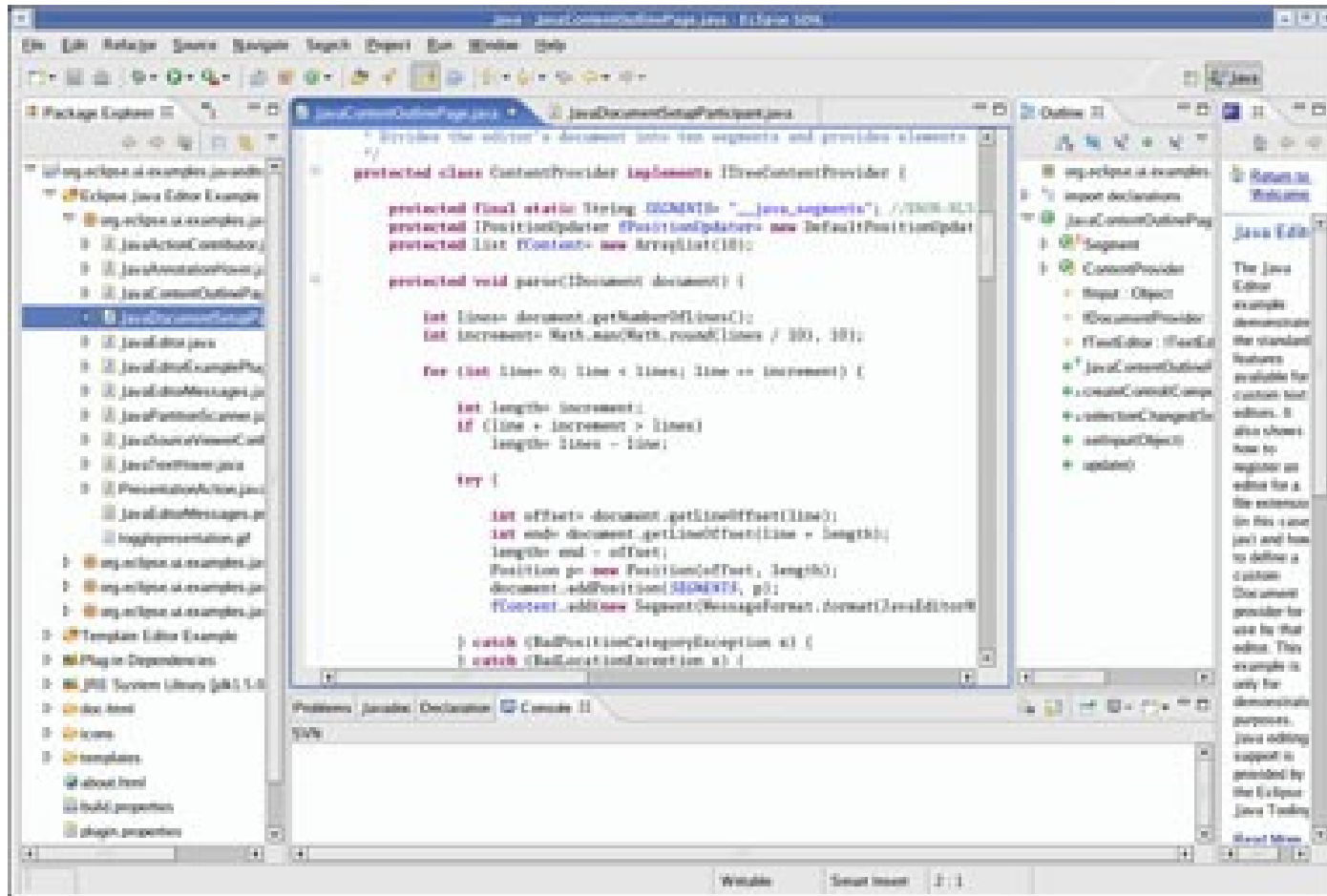
# NetBeans

- IDE:



# Eclipse

- IDE:





# Framework

# Python – Frameworks

- **Existen varios Frameworks para Python:**
  - **Django.**



# Python – Django

```
funciones.py
1
2 def aumenta_y_muestra(recibe):
3     x = 2
4     print x + recibe
5
6 def muestra():
7     print "_____ "
8
9 muestra()
10 aumenta_y_muestra(10)
```

```
Escritorio - arturojamaicagarcia@
+ Desktop python funciones.py
File "funciones.py", line 2
def aumenta_y_muestra(10):
                        ^
SyntaxError: invalid syntax
+ Desktop python funciones.py
Esta es mi primer funcion
12
+ Desktop python funciones.py
Esta es mi primer funcion
12
6
22
502
+ Desktop python funciones.py
_____
12
_____
6
```



# Como Servidor Web

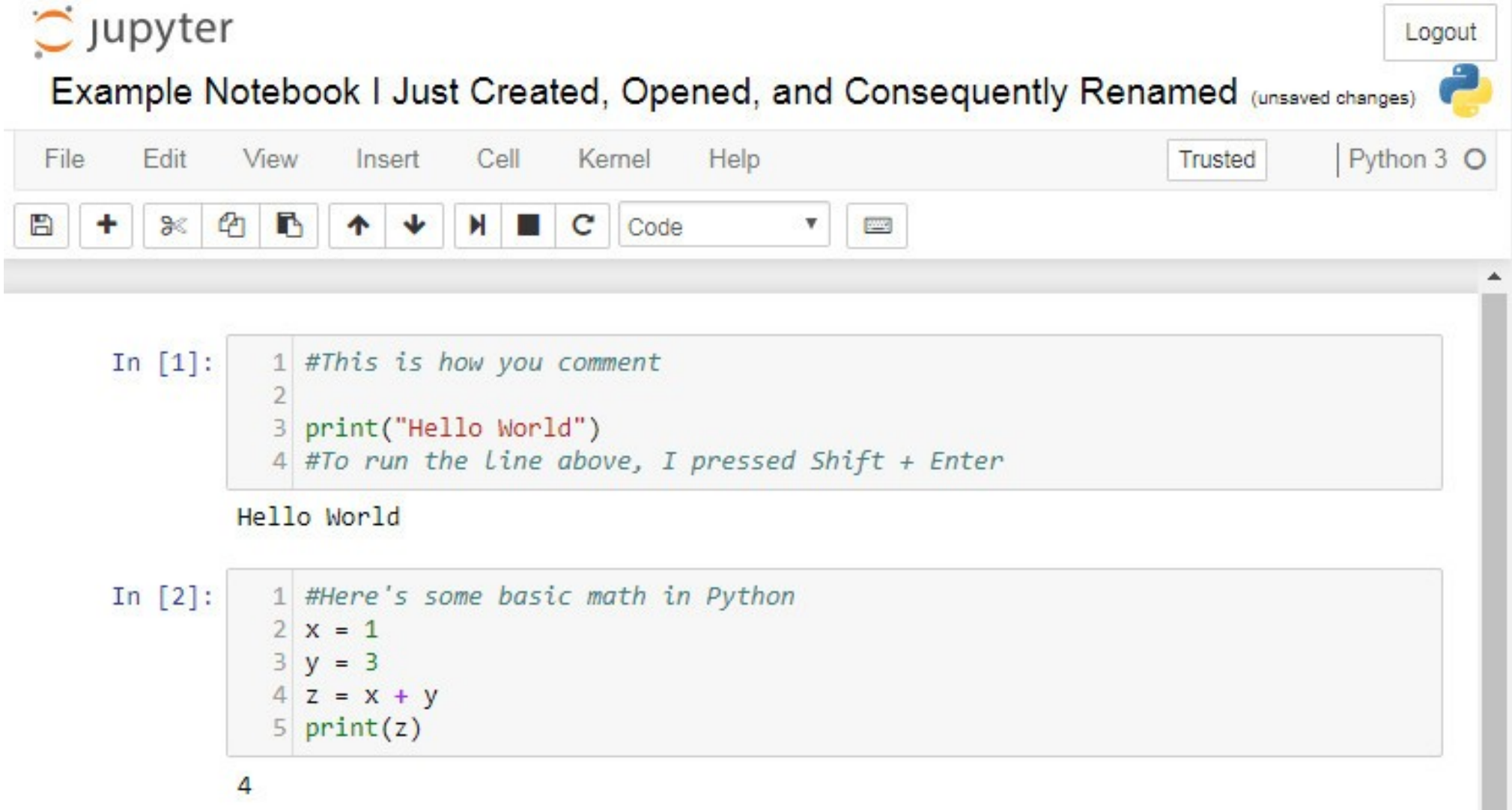
# Python – Anaconda

The screenshot displays the Anaconda Navigator web interface. At the top left is the 'ANACONDA NAVIGATOR' logo. On the right, there is a 'Sign in to Anaconda Cloud' button. A left-hand navigation sidebar contains links for 'Home', 'Environments', 'Projects (beta)', 'Learning', and 'Community'. Below these are buttons for 'Documentation', 'Developer Blog', and 'Feedback', along with social media icons for Twitter, YouTube, and GitHub. The main content area shows 'Applications on root' with a 'Channels' button and a 'Refresh' button. It features a grid of application cards:


- jupyterlab** (0.27.0): An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture. [Launch]
- jupyter notebook** (5.0.0): Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis. [Launch]
- qtconsole** (4.3.1): PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more. [Launch]
- spyder** (3.2.3): Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features. [Launch]
- glueviz** (0.10.4): Multidimensional data visualization across files. Explore relationships within and among related datasets. [Install]
- orange3** (3.4.1): Component based data mining framework. Data visualization and data analysis for novice and expert; interactive workflows with a large toolbox. [Install]
- rstudio** (1.0.153): A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks. [Install]















# Python – Anaconda (Jupyter)



jupyter Logout

Example Notebook I Just Created, Opened, and Consequently Renamed (unsaved changes) 

File Edit View Insert Cell Kernel Help Trusted | Python 3 

          Code 

In [1]:

```
1 #This is how you comment
2
3 print("Hello World")
4 #To run the line above, I pressed Shift + Enter
```

Hello World

In [2]:

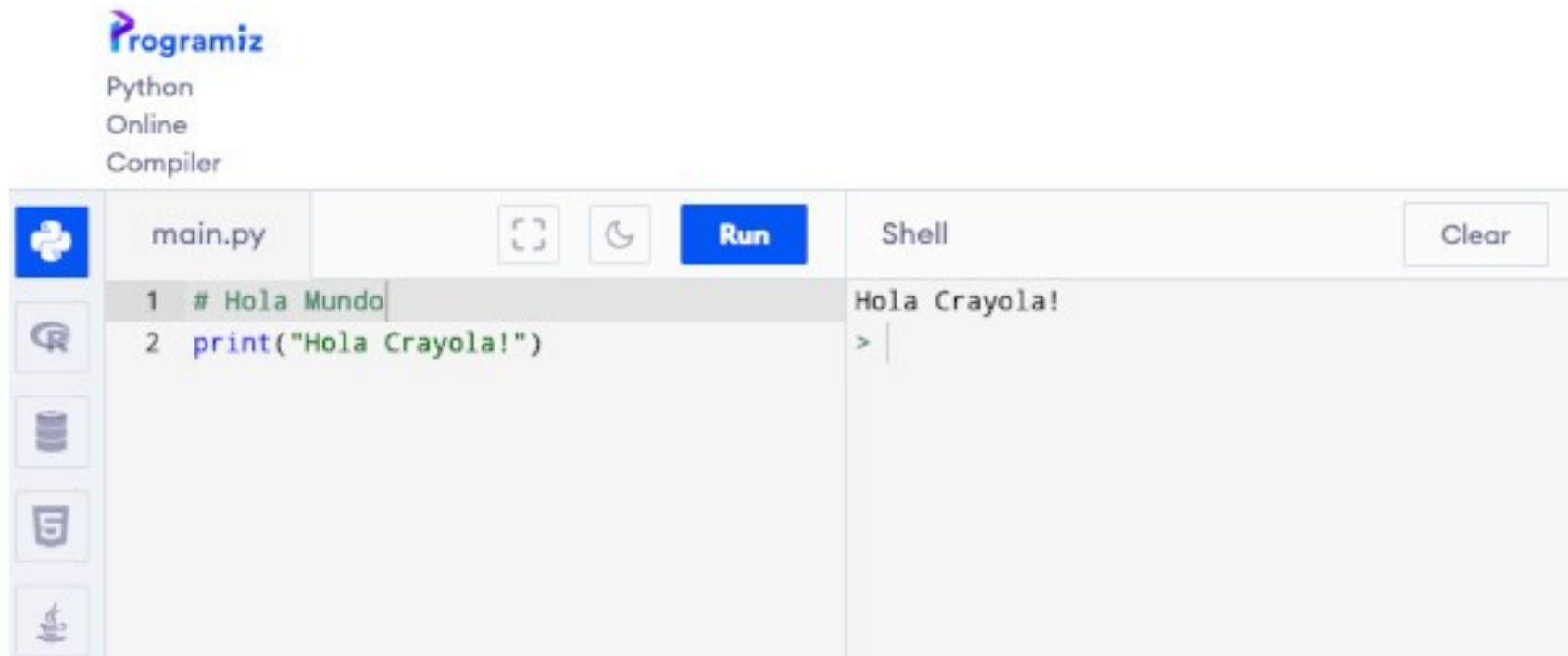
```
1 #Here's some basic math in Python
2 x = 1
3 y = 3
4 z = x + y
5 print(z)
```

4

Online

# Python Online

- Programiz:



Programiz  
Python  
Online  
Compiler

```
main.py
```

```
1 # Hola Mundo  
2 print("Hola Crayola!")
```

Run

Shell

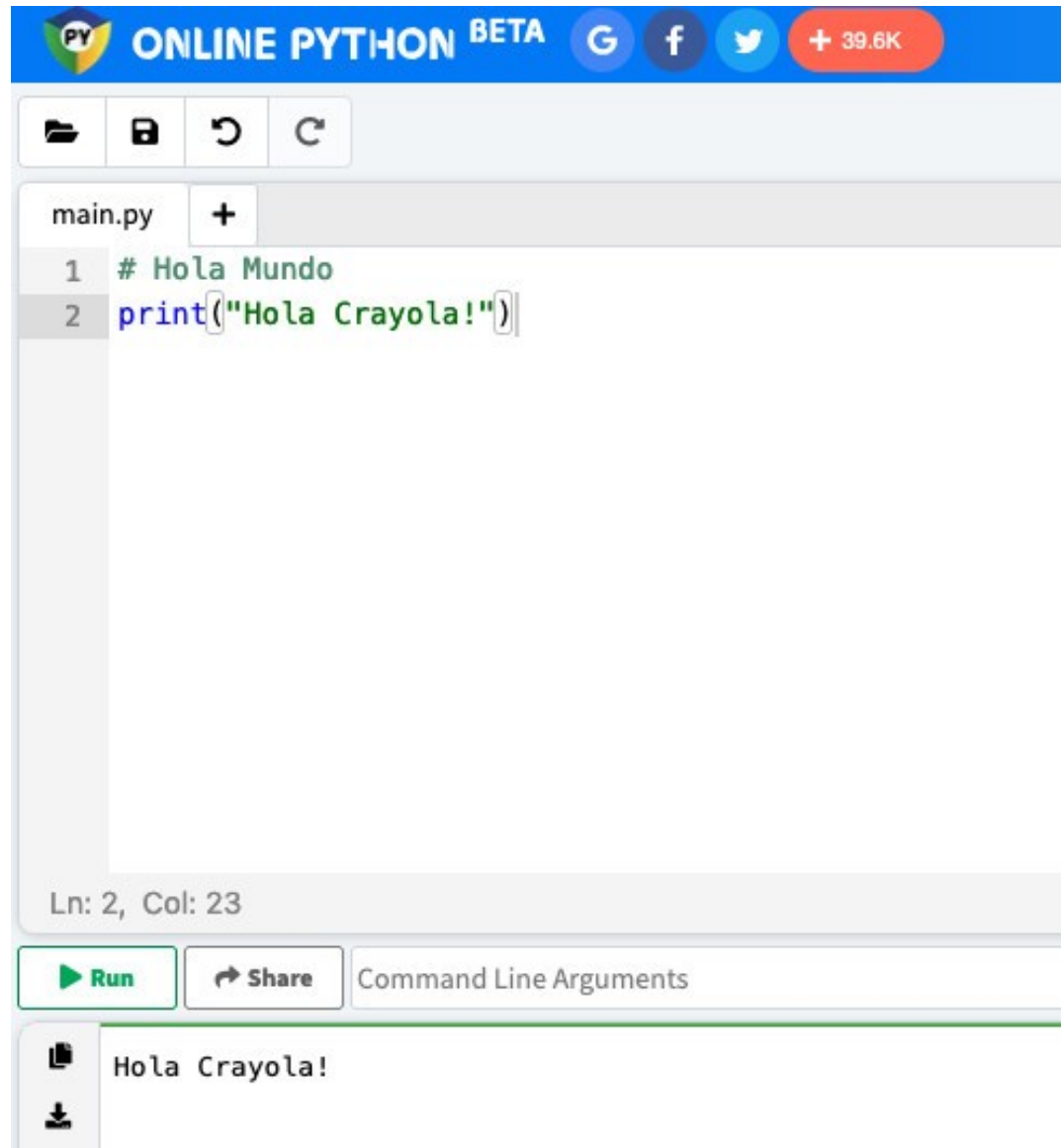
Hola Crayola!  
> |

Clear



# Python Online

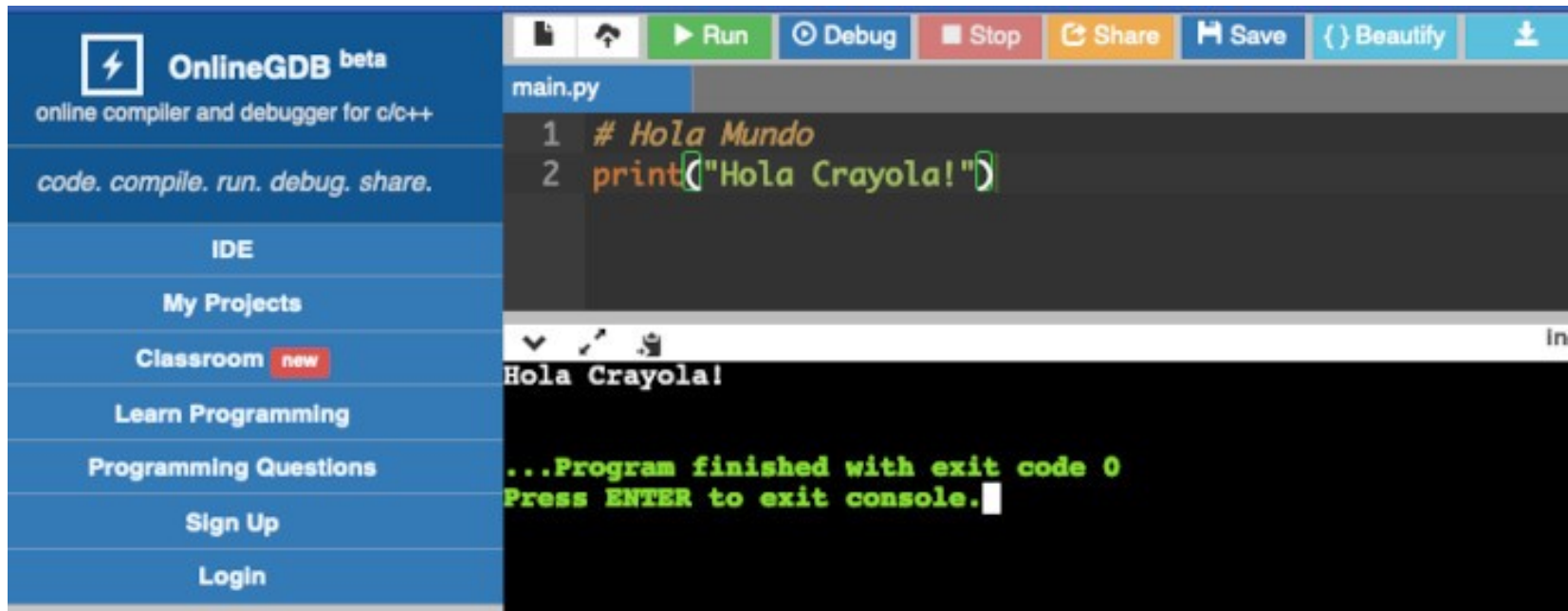
- **Online Python:**



The screenshot displays the Online Python Beta web interface. At the top, there is a blue header with the Python logo, the text "ONLINE PYTHON BETA", and social media icons for Google+, Facebook, and Twitter, along with a red button indicating "+ 39.6K". Below the header is a toolbar with icons for file operations. The main area is a code editor with a file named "main.py" open. The code contains two lines: a comment "# Hola Mundo" and a print statement "print('Hola Crayola!')". The cursor is positioned at the end of the second line. At the bottom of the editor, the status bar shows "Ln: 2, Col: 23". Below the editor is a control bar with a green "Run" button, a "Share" button, and a text input field for "Command Line Arguments". At the very bottom, there is a terminal window showing the output "Hola Crayola!" with a download icon.

# Python Online

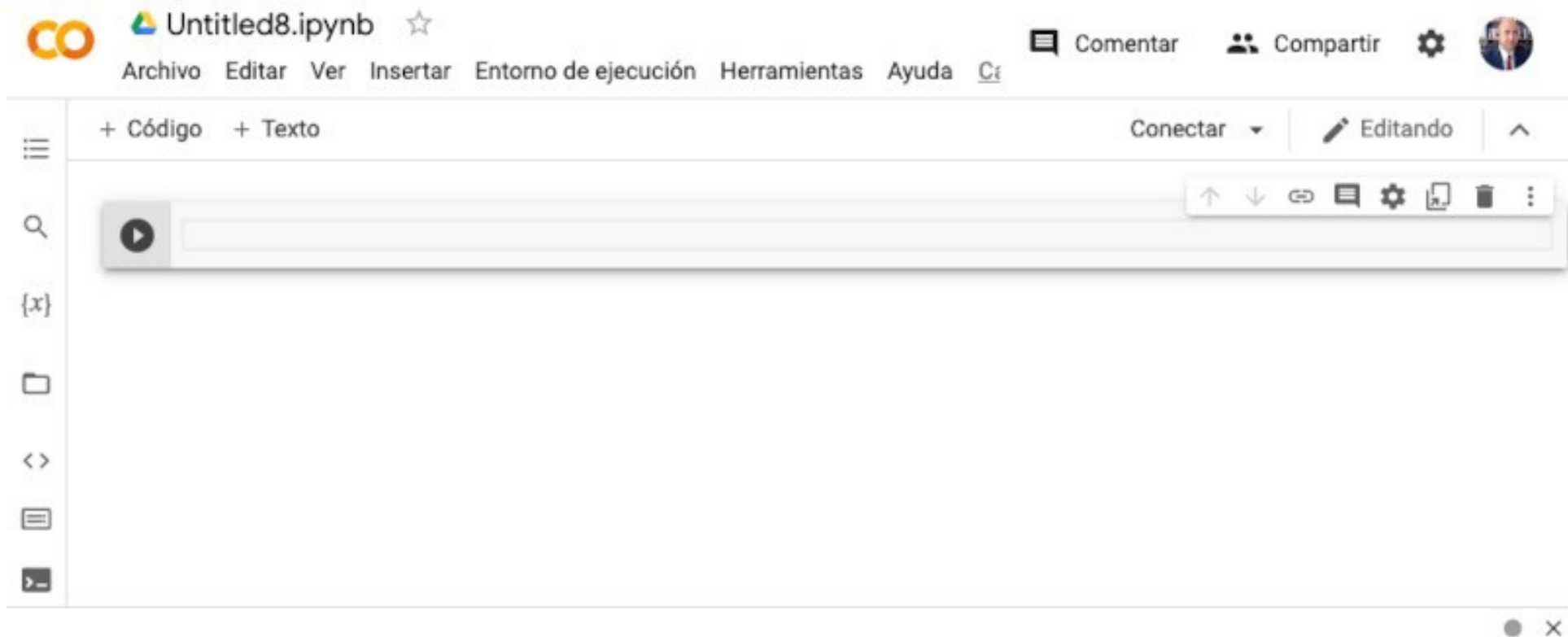
- **OnlineGDB:**



En Nube

# Python Cloud

- **Google Colaboratory:**





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