

# python

UNIVERSIDAD DE LAS FUERZAS ARMADAS

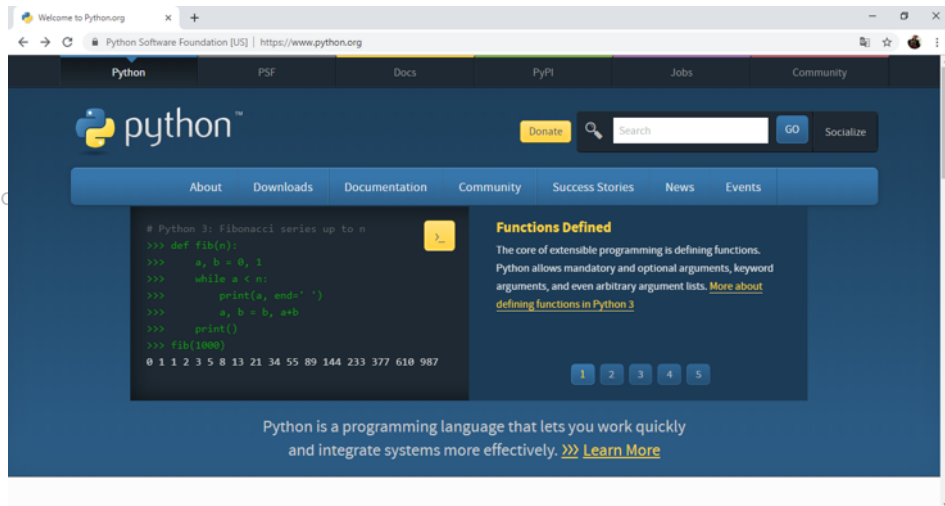
fig/tecnologia-informatica-placas-base-tecnologias\_382884.jpg  
May 28, 2019



The Kivy logo, consisting of the word "kivy" in a lowercase, orange, sans-serif font.

Kivy es una biblioteca gratuita y de código abierto de Python para desarrollar aplicaciones móviles y otro software de aplicación multitáctil con una interfaz de usuario natural.

# 1. Descargar Phyton ingresando a la pagina (https://www.python.org/).



The screenshot shows the Python.org website. The main navigation bar includes links for Python, PSF, Docs, PyPI, Jobs, and Community. Below this is a secondary navigation bar with links for About, Downloads, Documentation, Community, Success Stories, News, and Events. The main content area features a large code block on the left with a Python 3 Fibonacci series example, and a section titled "Functions Defined" on the right. The code block shows the following code:

```
# Python 3: Fibonacci series up to n
>>> def fib(n):
>>>     a, b = 0, 1
>>>     while a < n:
>>>         print(a, end=' ')
>>>         a, b = b, a+b
>>>     print()
>>> fib(1000)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
```

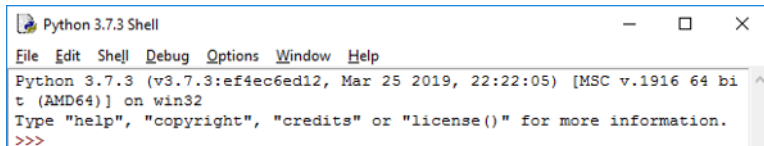
The "Functions Defined" section states: "The core of extensible programming is defining functions. Python allows mandatory and optional arguments, keyword arguments, and even arbitrary argument lists. [More about defining functions in Python 3](#)".

At the bottom of the page, it says: "Python is a programming language that lets you work quickly and integrate systems more effectively. >>> [Learn More](#)".

1. Hacer clic en Download y entraremos a esta sección, descargamos la ultima versión.

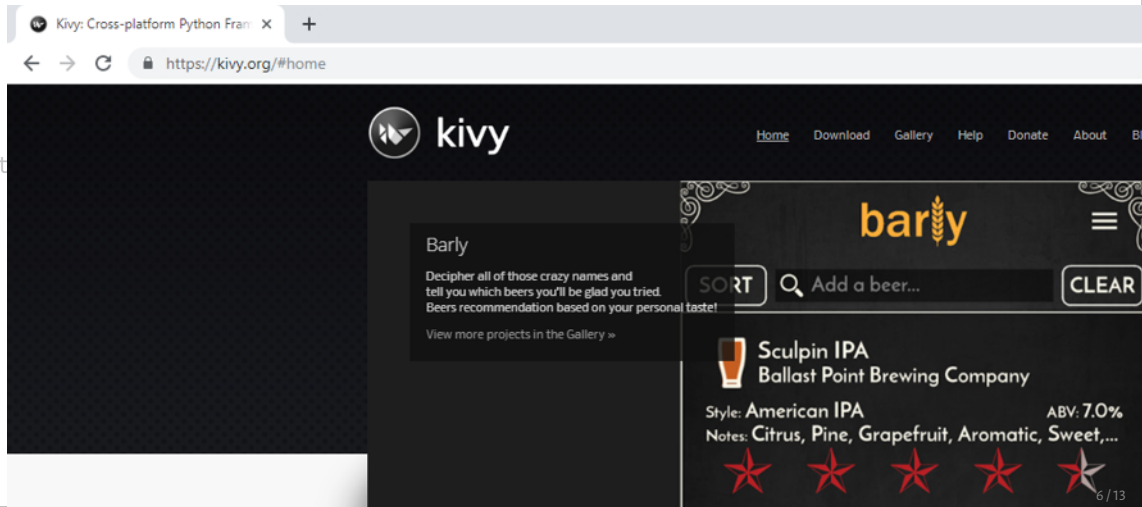
The screenshot shows the Python.org website's download page. The browser's address bar displays the URL <https://www.python.org/downloads/>. The website's navigation bar includes links for Python, PSF, Docs, PyPI, Jobs, and Community. Below this, a secondary navigation bar contains links for About, Downloads, Documentation, Community, Success Stories, News, and Events. The main content area features the Python logo, a 'Donate' button, a search bar, and a 'Socialize' button. A prominent section titled 'Download the latest version for Windows' includes a 'Download Python 3.7.3' button. Below this, text provides links for other operating systems (Windows, Linux/UNIX, Mac OS X, Other), pre-releases, and Docker images. A large illustration of two parachutes carrying boxes is positioned to the right of the text. At the bottom, a yellow banner encourages contributing to the PSF by purchasing a PyCharm license, with a 'Donate Now' button. The browser's address bar at the bottom shows the specific download link: <https://www.python.org/ftp/python/3.7.3/python-3.7.3.exe>.

1. Ejecutamos y colocamos permitir después se comenzare a instalar, entramos a la ventana de Python.

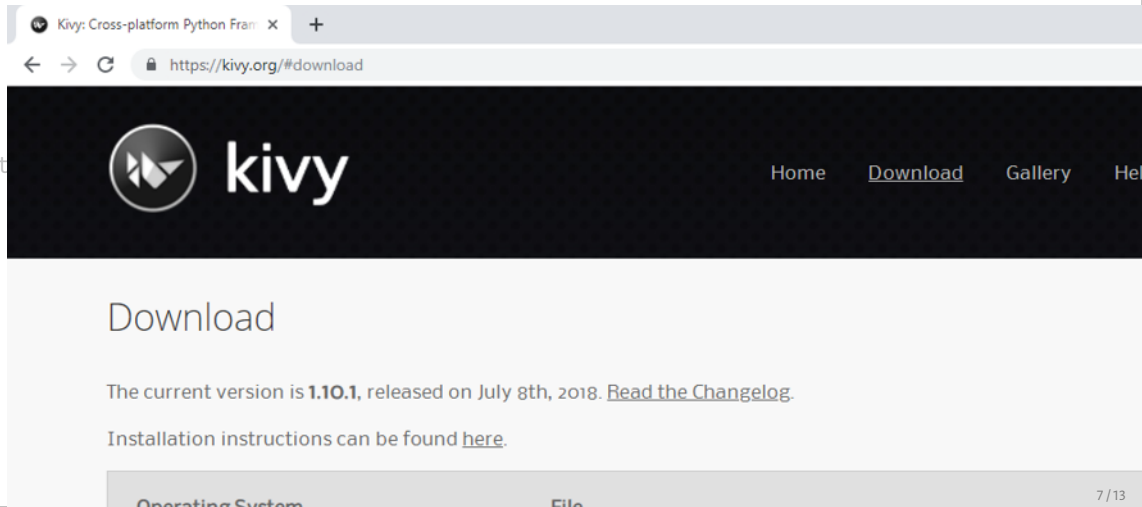


```
Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
```

1. Descargar kivy (todos sus componentes) entramos a la pagina (<https://kivy.org/home>)




1. Nos vamos a Download y nos vamos donde dice descargar para Windows



The screenshot shows a web browser window with the Kivy website. The browser's address bar displays the URL <https://kivy.org/#download>. The website's header is dark with the Kivy logo on the left and navigation links 'Home', 'Download', 'Gallery', and 'Help' on the right. The 'Download' link is underlined. The main content area has a large 'Download' heading, followed by text stating 'The current version is **1.10.1**, released on July 8th, 2018. [Read the Changelog.](#)' and 'Installation instructions can be found [here](#).' At the bottom, a table is partially visible with columns for 'Operating System' and 'File'.

Kivy: Cross-platform Python Framework

← → ↻ <https://kivy.org/#download>

 **kivy**

Home Download Gallery Help

## Download

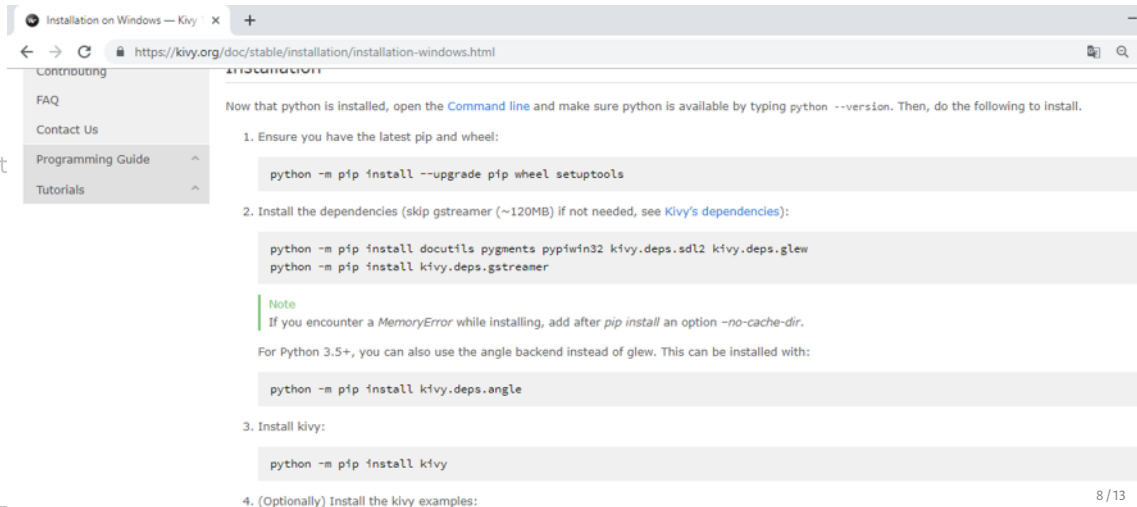
The current version is **1.10.1**, released on July 8th, 2018. [Read the Changelog.](#)

Installation instructions can be found [here](#).

Operating System	File
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## 1. Después copiamos todos los codigos en CDM para poder descargar kivy

fig/t



The screenshot shows a web browser window with the URL <https://kivy.org/doc/stable/installation/installation-windows.html>. The left sidebar contains a navigation menu with the following items: Contributing, FAQ, Contact Us, Programming Guide (highlighted with a caret), and Tutorials (with a caret). The main content area is titled "Installation" and contains the following text:

Now that python is installed, open the [Command line](#) and make sure python is available by typing `python --version`. Then, do the following to install.

1. Ensure you have the latest pip and wheel:

```
python -m pip install --upgrade pip wheel setuptools
```
2. Install the dependencies (skip gstreamer (~120MB) if not needed, see [Kivy's dependencies](#)):

```
python -m pip install docutils pygments pypiwin32 kivy.deps.sdl2 kivy.deps.glew
python -m pip install kivy.deps.gstreamer
```

**Note**  
If you encounter a `MemoryError` while installing, add after `pip install` an option `-no-cache-dir`.

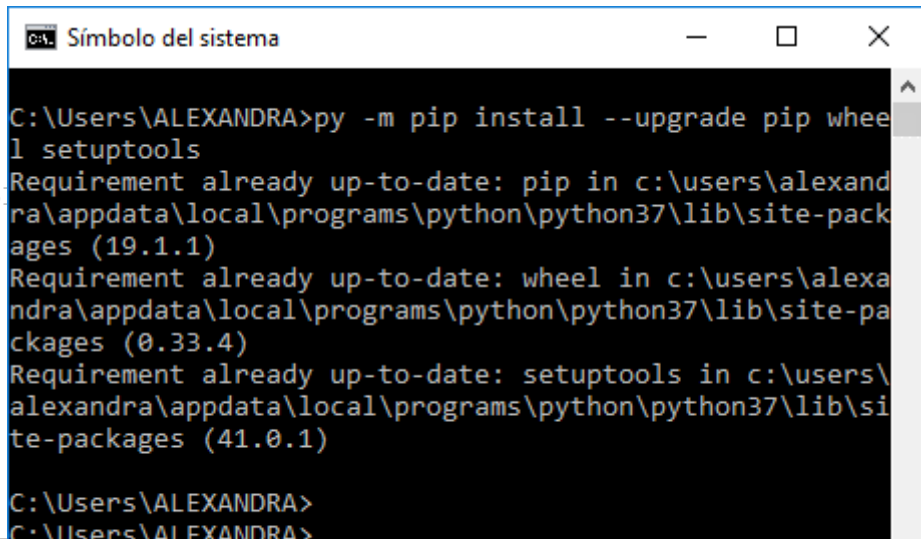
For Python 3.5+, you can also use the angle backend instead of glew. This can be installed with:

```
python -m pip install kivy.deps.angle
```
3. Install kivy:

```
python -m pip install kivy
```
4. (Optionally) Install the kivy examples:



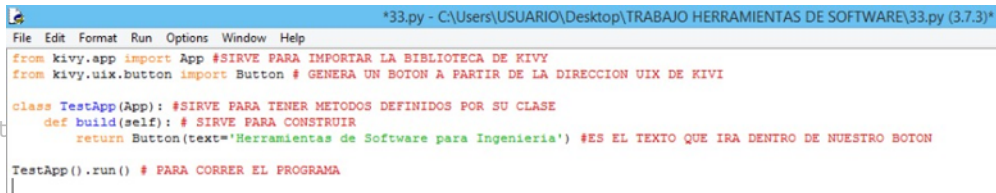
1. Guiarse en los ejemplos que nos da en la parte de instalación de kivy



```
C:\Users\ALEXANDRA>py -m pip install --upgrade pip wheel
1 setuptools
Requirement already up-to-date: pip in c:\users\alexandra\appdata\local\programs\python\python37\lib\site-packages (19.1.1)
Requirement already up-to-date: wheel in c:\users\alexandra\appdata\local\programs\python\python37\lib\site-packages (0.33.4)
Requirement already up-to-date: setuptools in c:\users\alexandra\appdata\local\programs\python\python37\lib\site-packages (41.0.1)

C:\Users\ALEXANDRA>
C:\Users\ALEXANDRA>
```

1. Aquí comenzamos a modificar para poder obtener lo que queremos lograr ver en la aplicación que estamos por crear.



A screenshot of a Python IDE window titled '\*33.py - C:\Users\USUARIO\Desktop\TRABAJO HERRAMIENTAS DE SOFTWARE\33.py (3.7.3)\*'. The window has a menu bar with 'File', 'Edit', 'Format', 'Run', 'Options', 'Window', and 'Help'. The code editor contains the following Python code:

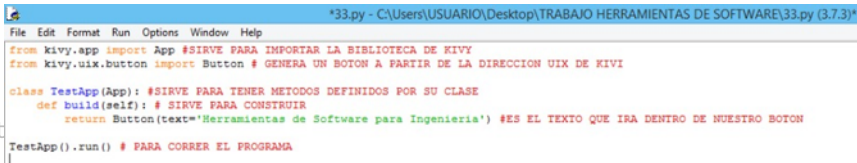
```
from kivy.app import App #SIRVE PARA IMPORTAR LA BIBLIOTECA DE KIVY
from kivy.uix.button import Button # GENERA UN BOTON A PARTIR DE LA DIRECCION UIX DE KIVI

class TestApp(App): #SIRVE PARA TENER METODOS DEFINIDOS POR SU CLASE
    def build(self): # SIRVE PARA CONSTRUIR
        return Button(text='Herramientas de Software para Ingenieria') #ES EL TEXTO QUE IRA DENTRO DE NUESTRO BOTON

TestApp().run() # PARA CORRER EL PROGRAMA
```

fig/t

finalizar con la creación de la aplicación móvil vamos a poner correr obteniendo como resultado la aplicación con la frase que hemos ingresado

A screenshot of a text editor window titled '\*33.py - C:\Users\USUARIO\Desktop\TRABAJO HERRAMIENTAS DE SOFTWARE\33.py (3.7.3)\*'. The editor contains Python code for a Kivy application. The code imports 'App' and 'Button' from 'kivy.app' and 'kivy.uix.button' respectively. It defines a 'TestApp' class that inherits from 'App', with a 'build' method that returns a 'Button' widget with the text 'Herramientas de Software para Ingenieria'. Finally, it calls 'TestApp().run()' to execute the program. The code is color-coded: keywords in blue, comments in red, and strings in green. On the left side of the image, the text 'fig/t' is partially visible.

```
from kivy.app import App #SIRVE PARA IMPORTAR LA BIBLIOTECA DE KIVY
from kivy.uix.button import Button # GENERA UN BOTON A PARTIR DE LA DIRECCION UIX DE KIVI

class TestApp(App): #SIRVE PARA TENER METODOS DEFINIDOS POR SU CLASE
    def build(self): # SIRVE PARA CONSTRUIR
        return Button(text='Herramientas de Software para Ingenieria') #ES EL TEXTO QUE IRA DENTRO DE NUESTRO BOTON

TestApp().run() # PARA CORRER EL PROGRAMA
```

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