

Instrucciones para la instalación de Python en Windows

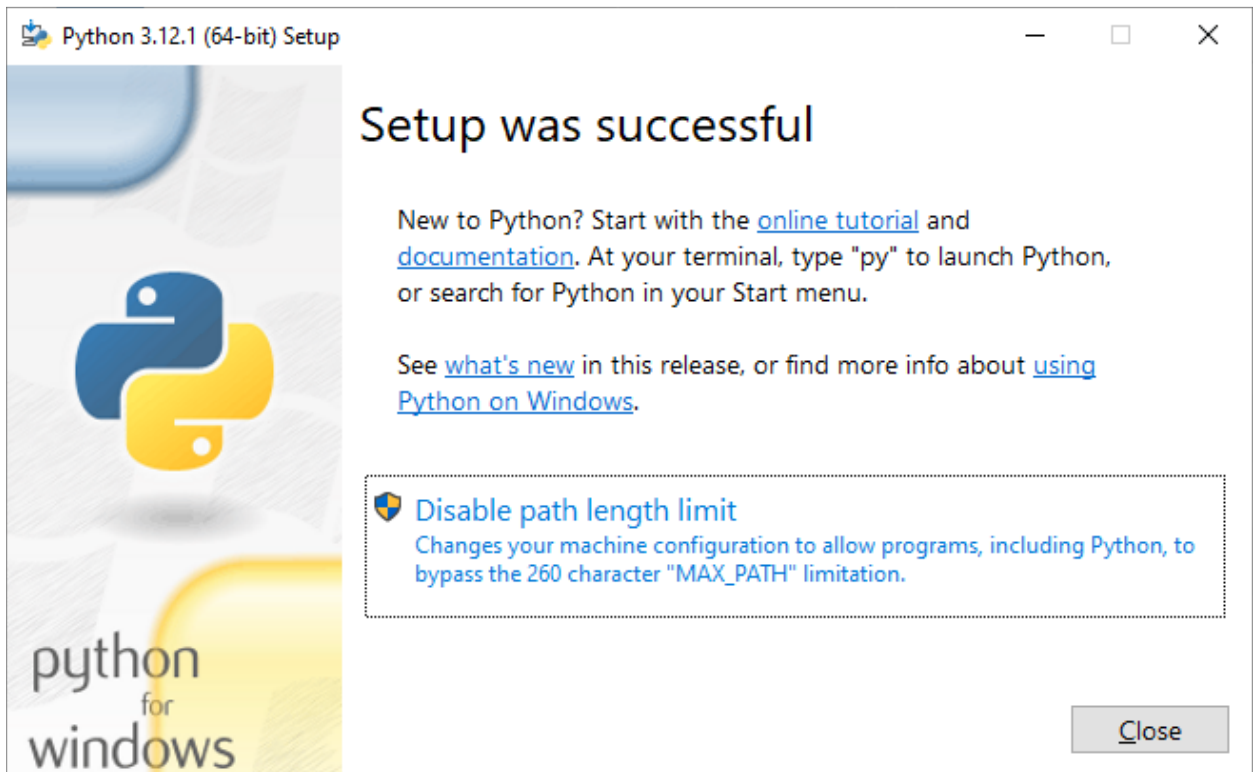
1. Ir al enlace (<https://www.python.org/downloads/release/python-3121/>), se recomienda descargar la versión Windows installer (64-bit).

Version	Operating System	Description	MD5 Sum	File Size	GPG	Sigstore
Gzipped source tarball	Source release		51c5c22dc698483734dff5c8028606	27053241	SIG	.sigstore
XZ compressed source tarball	Source release		50f827c800483776c8ef86e6a53831fa	20583448	SIG	.sigstore
macOS 64-bit universal2 installer	macOS	for macOS 10.9 and later	eae2d617cbd978a4a6c167924b287572	45377529	SIG	.sigstore
Windows embeddable package (32-bit)	Windows		acc28815c74facc402469e917c8f8433	9849182	SIG	.sigstore
Windows embeddable package (64-bit)	Windows		019788d34af2c60a7be45bf8273e361f	11061655	SIG	.sigstore
Windows embeddable package (ARM64)	Windows		18058aa3c8cbf3e8fee53386d38c711	10277136	SIG	.sigstore
Windows installer (32-bit)	Windows		37a89a09138888e6331ec279d68fea8e	25253448	SIG	.sigstore
Windows installer (64-bit)	Windows	Recommended	3e3b6550e58772d324f7519bfa8066dc	26589696	SIG	.sigstore
Windows installer (ARM64)	Windows	Experimental	25fb741f175dc98d5630520f2df931ec	25806784	SIG	.sigstore

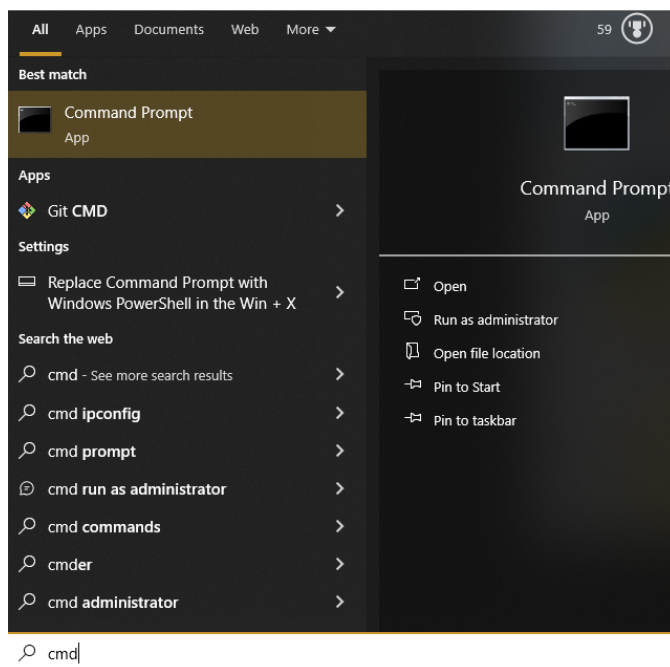
2. Ejecutamos el archivo y configuramos el Python 3.12.1 con las siguientes opciones habilitadas (**use admin privileges** y **add Python.exe to path**). Posteriormente, le damos a **Install now**.



3. Si la instalación es correcta mostrara un mensaje de instalación exitosa. Adicionalmente, es importante dar clic a la opción **Disable path length limit**.



4. Terminado el proceso, nos vamos al buscador de Windows y colocamos la palabra **cmd**.



5. Ejecutamos el **Command Prompt** y colocamos el comando:

```
py --version
```



```
Command Prompt
Microsoft Windows [Version 10.0.19045.3930]
(c) Microsoft Corporation. All rights reserved.

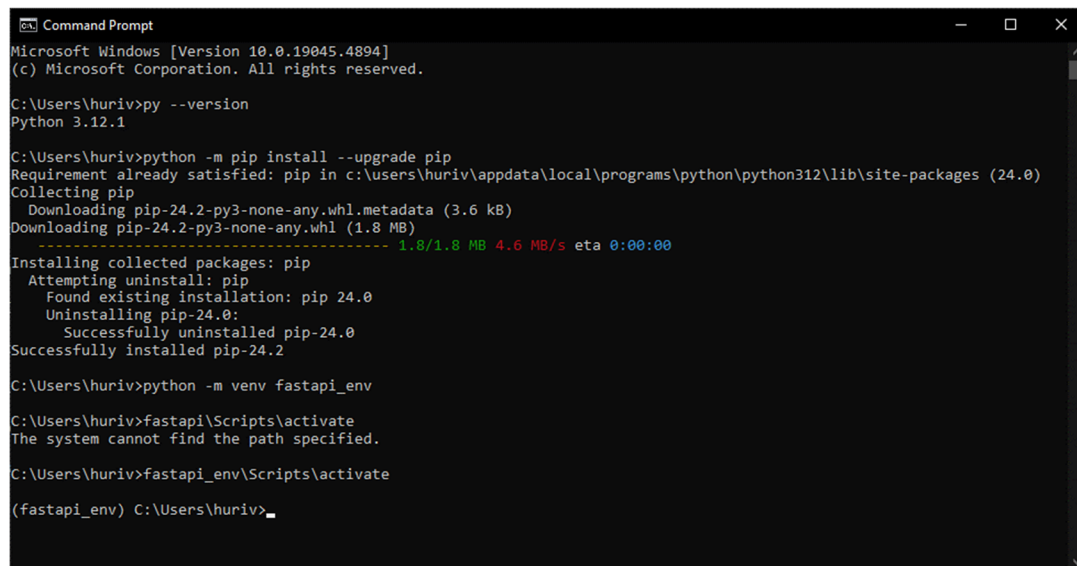
C:\Users\huriv>py --version
Python 3.12.1

C:\Users\huriv>
```

Si los pasos anteriores se realizaron de forma correcta, entonces el Python va responder con su versión instalada

6. Necesitaremos actualizar la dependencia llamada pip, ejecutamos el siguiente comando en la consola:

```
python -m pip install --upgrade pip
```



```
Command Prompt
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\huriv>py --version
Python 3.12.1

C:\Users\huriv>python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\huriv\appdata\local\programs\python\python312\lib\site-packages (24.0)
Collecting pip
  Downloading pip-24.2-py3-none-any.whl.metadata (3.6 kB)
  Downloading pip-24.2-py3-none-any.whl (1.8 MB)
----- 1.8/1.8 MB 4.6 MB/s eta 0:00:00
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 24.0
    Uninstalling pip-24.0:
      Successfully uninstalled pip-24.0
Successfully installed pip-24.2

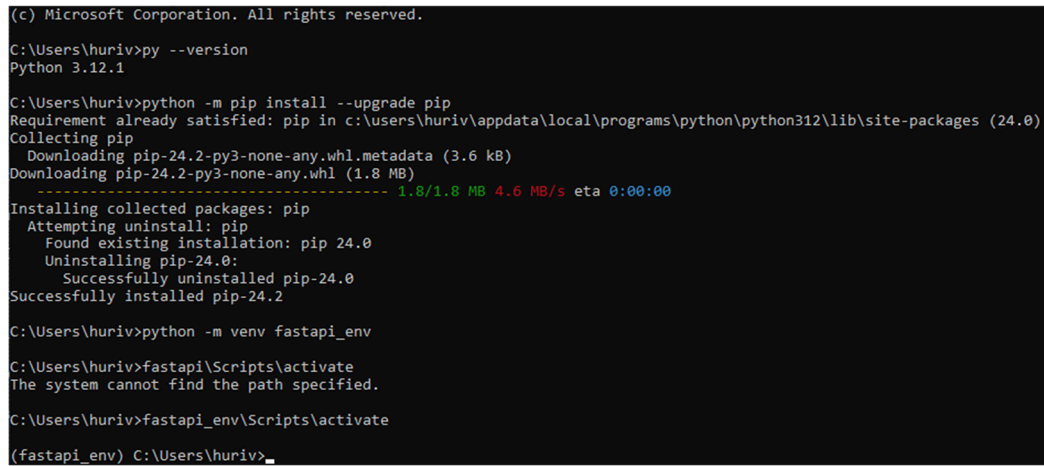
C:\Users\huriv>python -m venv fastapi_env

C:\Users\huriv>fastapi\Scripts\activate
The system cannot find the path specified.

C:\Users\huriv>fastapi_env\Scripts\activate
(fastapi_env) C:\Users\huriv>
```

- Posteriormente, con todos estos pasos realizados, necesitaremos crear un entorno virtual de Python para un mejor control de las librerías implementadas. (p.e., creamos el entorno, lo activamos y salimos del mismo):

```
python -m venv fastapi_env
fastapi_env\Scripts\activate
deactivate
```



```
(c) Microsoft Corporation. All rights reserved.

C:\Users\huriv>py --version
Python 3.12.1

C:\Users\huriv>python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\huriv\appdata\local\programs\python\python312\lib\site-packages (24.0)
Collecting pip
  Downloading pip-24.2-py3-none-any.whl.metadata (3.6 kB)
  Downloading pip-24.2-py3-none-any.whl (1.8 MB)
    ----- 1.8/1.8 MB 4.6 MB/s eta 0:00:00
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 24.0
    Uninstalling pip-24.0:
      Successfully uninstalled pip-24.0
Successfully installed pip-24.2

C:\Users\huriv>python -m venv fastapi_env

C:\Users\huriv>fastapi_env\Scripts\activate
The system cannot find the path specified.

C:\Users\huriv>fastapi_env\Scripts\activate
(fastapi_env) C:\Users\huriv>
```

- Una vez activado el entorno, procederemos a instalar las dependencias para Fast API. Recordemos que cada vez que queramos trabajar con Fast API activar este entorno:

```
fastapi_env\Scripts\activate

python -m pip install --upgrade pip

pip install fastapi uvicorn PyMySQL gunicorn sqlalchemy
```

```
Command Prompt
Requirement already satisfied: fastapi in c:\users\huriv\fastapi_env\lib\site-packages (0.115.0)
Requirement already satisfied: uvicorn in c:\users\huriv\fastapi_env\lib\site-packages (0.31.0)
Requirement already satisfied: mariadb==1.1.10 in c:\users\huriv\fastapi_env\lib\site-packages (1.1.10)
Requirement already satisfied: gunicorn in c:\users\huriv\fastapi_env\lib\site-packages (23.0.0)
Requirement already satisfied: sqlalchemy in c:\users\huriv\fastapi_env\lib\site-packages (2.0.35)
Requirement already satisfied: packaging in c:\users\huriv\fastapi_env\lib\site-packages (from mariadb==1.1.10) (24.1)
Requirement already satisfied: starlette<0.39.0,>=0.37.2 in c:\users\huriv\fastapi_env\lib\site-packages (from fastapi) (0.38.6)
Requirement already satisfied: pydantic!=1.8,!<1.8.1,!<2.0.0,!<2.0.1,!<2.1.0,<3.0.0,>=1.7.4 in c:\users\huriv\fastapi_env\lib\site-packages (from fastapi) (2.9.2)
Requirement already satisfied: typing-extensions>=4.8.0 in c:\users\huriv\fastapi_env\lib\site-packages (from fastapi) (4.12.2)
Requirement already satisfied: click>=7.0 in c:\users\huriv\fastapi_env\lib\site-packages (from uvicorn) (8.1.7)
Requirement already satisfied: h11>=0.8 in c:\users\huriv\fastapi_env\lib\site-packages (from uvicorn) (0.14.0)
Requirement already satisfied: greenlet!=0.4.17 in c:\users\huriv\fastapi_env\lib\site-packages (from sqlalchemy) (3.1.1)
Requirement already satisfied: colorama in c:\users\huriv\fastapi_env\lib\site-packages (from click>=7.0->uvicorn) (0.4.6)
Requirement already satisfied: annotated-types>=0.6.0 in c:\users\huriv\fastapi_env\lib\site-packages (from pydantic!=1.8,!<1.8.1,!<2.0.0,!<2.0.1,!<2.1.0,<3.0.0,>=1.7.4->fastapi) (0.7.0)
Requirement already satisfied: pydantic-core==2.23.4 in c:\users\huriv\fastapi_env\lib\site-packages (from pydantic!=1.8,!<1.8.1,!<2.0.0,!<2.0.1,!<2.1.0,<3.0.0,>=1.7.4->fastapi) (2.23.4)
Requirement already satisfied: anyio<5,>=3.4.0 in c:\users\huriv\fastapi_env\lib\site-packages (from starlette<0.39.0,>=0.37.2->fastapi) (4.6.0)
Requirement already satisfied: idna>=2.8 in c:\users\huriv\fastapi_env\lib\site-packages (from anyio<5,>=3.4.0->starlette<0.39.0,>=0.37.2->fastapi) (3.10)
Requirement already satisfied: sniffio==1.1 in c:\users\huriv\fastapi_env\lib\site-packages (from anyio<5,>=3.4.0->starlette<0.39.0,>=0.37.2->fastapi) (1.3.1)
(fastapi_env) C:\Users\huriv>
```

Posteriormente, clonamos el repositorio Git con un proyecto sencillo de una demo API usando FastAPI y MariaDB.

```
git clone https://github.com/huriviades/prueba_conversiones_fastapi.git
```

```
Command Prompt

(fastapi_env) C:\Users\huriv>git clone https://github.com/huriviades/prueba_conversiones_fastapi.git
Cloning into 'prueba_conversiones_fastapi'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), 4.71 KiB | 4.71 MiB/s, done.

(fastapi_env) C:\Users\huriv>
```

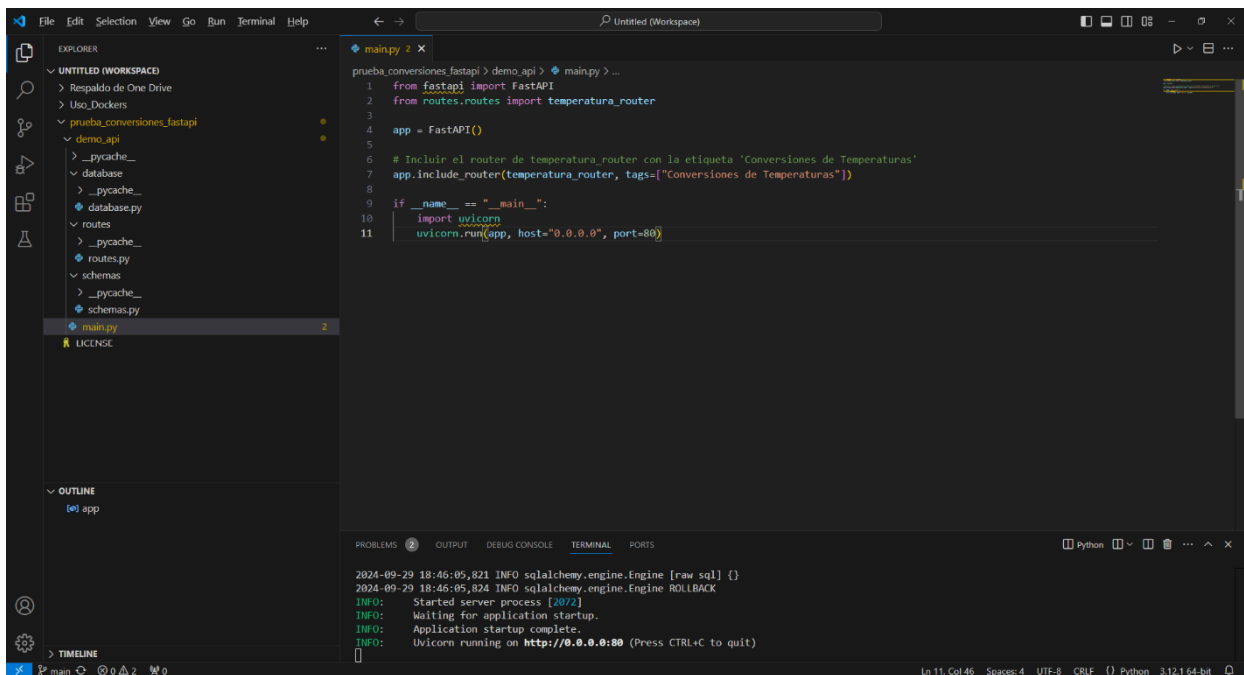
9. Ejecutamos el IDE de visual studio para la acceder en el proyecto Fast API. Recuerde utilizar la terminal con cmd (command prompt).

```
fastapi_env\Scripts\activate

cd prueba_conversiones_fastapi

cd demo_api

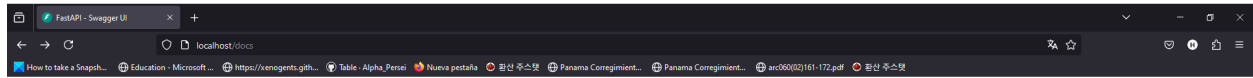
uvicorn main:app --host 0.0.0.0 --port 80
```



```
main.py x
prueba_conversiones_fastapi > demo_api > main.py > ...
1 from fastapi import FastAPI
2 from routes.routes import temperatura_router
3
4 app = FastAPI()
5
6 # Incluir el router de temperatura_router con la etiqueta "Conversiones de Temperaturas"
7 app.include_router(temperatura_router, tags=["Conversiones de Temperaturas"])
8
9 if __name__ == "__main__":
10     import uvicorn
11     uvicorn.run(app, host="0.0.0.0", port=80)

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS
2024-09-29 18:46:05,821 INFO sqlalchemy.engine.Engine [raw sql] {}
2024-09-29 18:46:05,824 INFO sqlalchemy.engine.Engine ROLLBACK
INFO: Started server process [2072]
INFO: Waiting for application startup.
INFO: Application startup complete.
INFO: Uvicorn running on http://0.0.0.0:80 (Press CTRL+C to quit)
```

http://localhost/docs



FastAPI 0.1.0 **OAS 3.1**
openapi.json

Conversiones de Temperaturas

GET	/api/conversiones/temperatura	Get Conversion Temperatura	▼
POST	/api/conversiones/temperatura	Create Conversion Temperatura	▼

Schemas			
ConversionTemperaturaSchema > Expand all object			
ConversionTemperaturaSchema > Expand all object			
HTTPValidationError > Expand all object			
ValidationError > Expand all object			