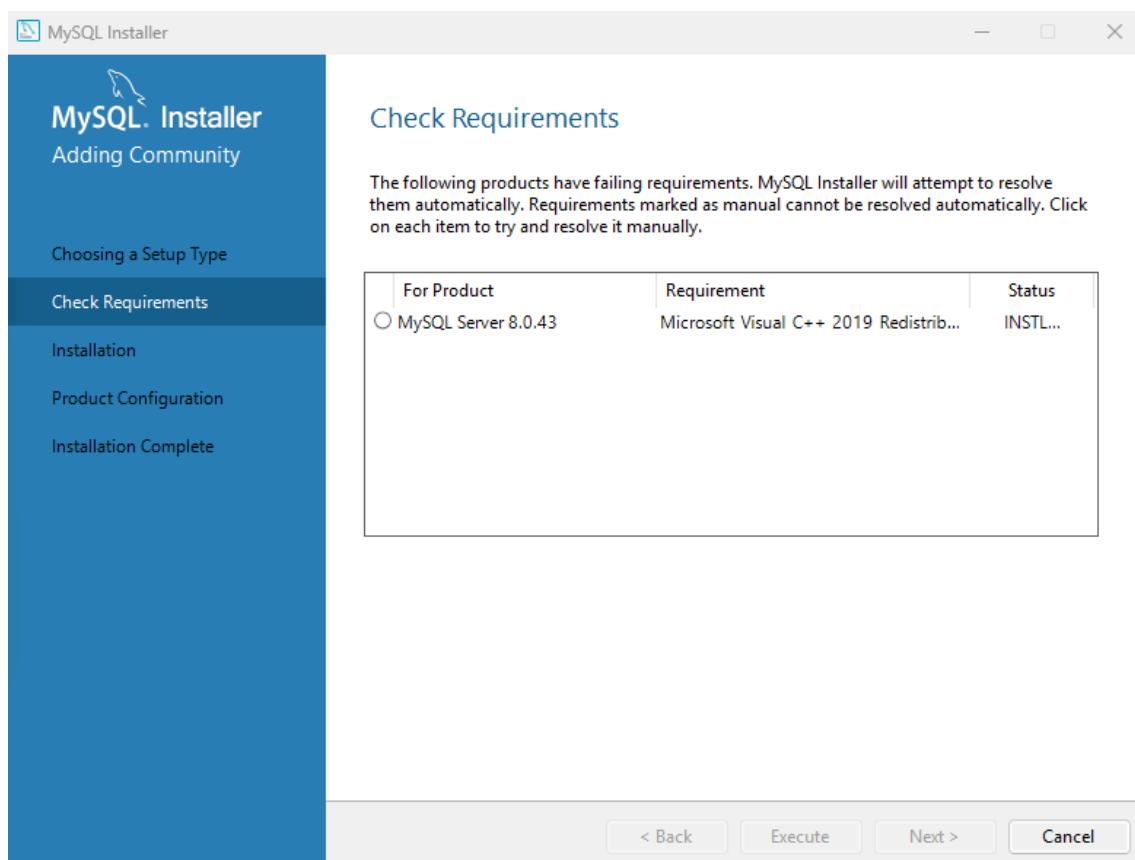
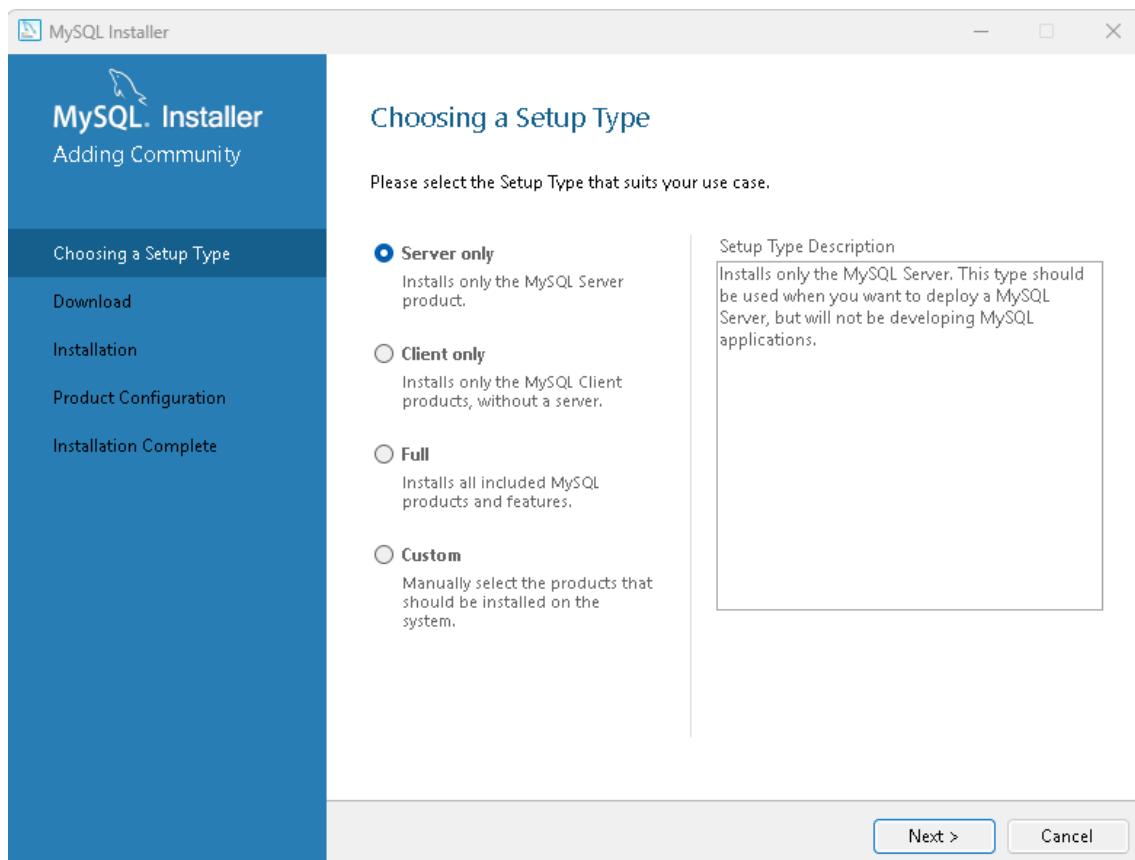
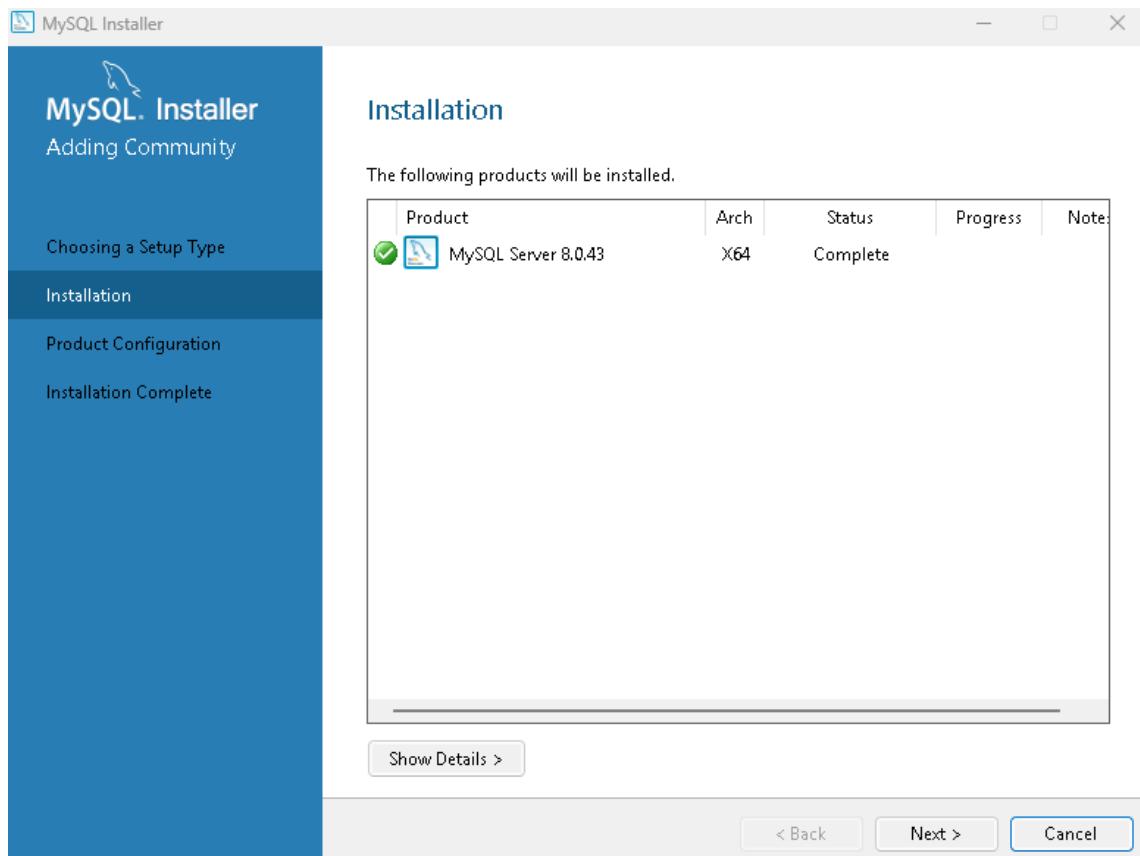
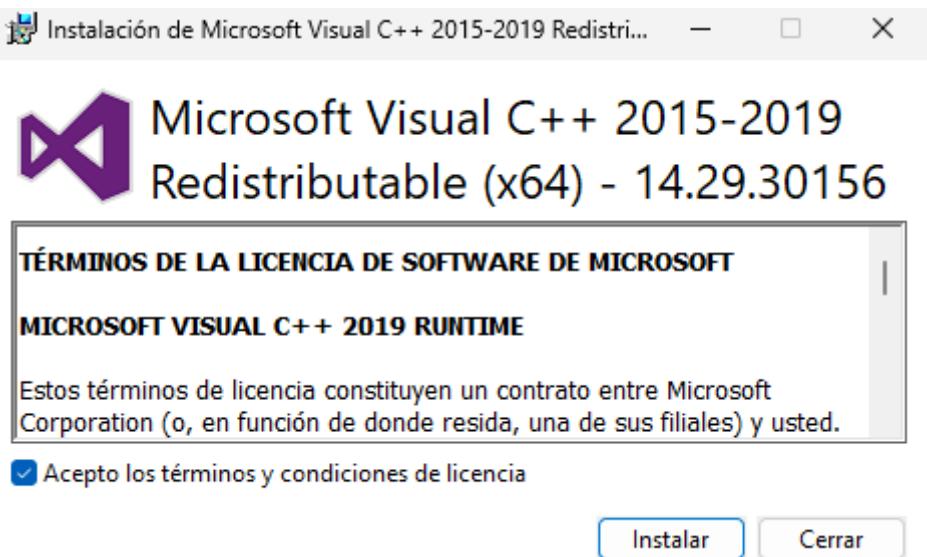
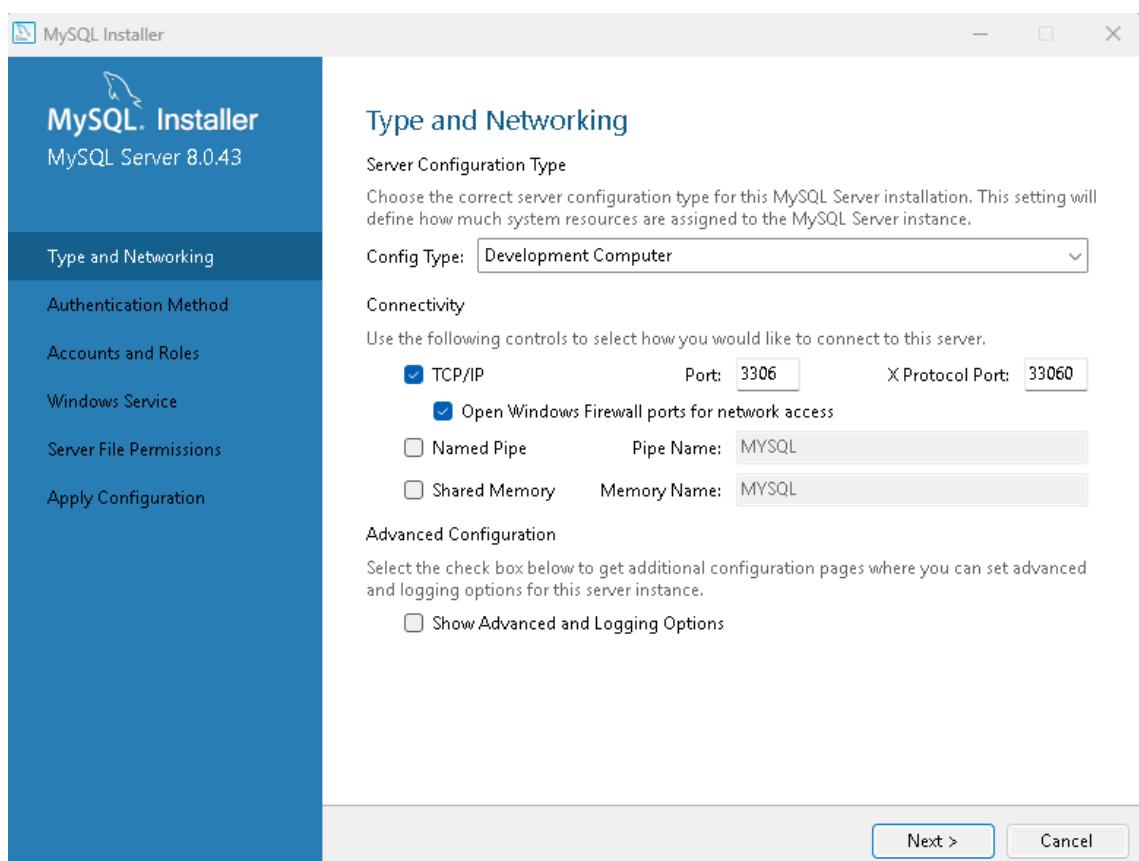
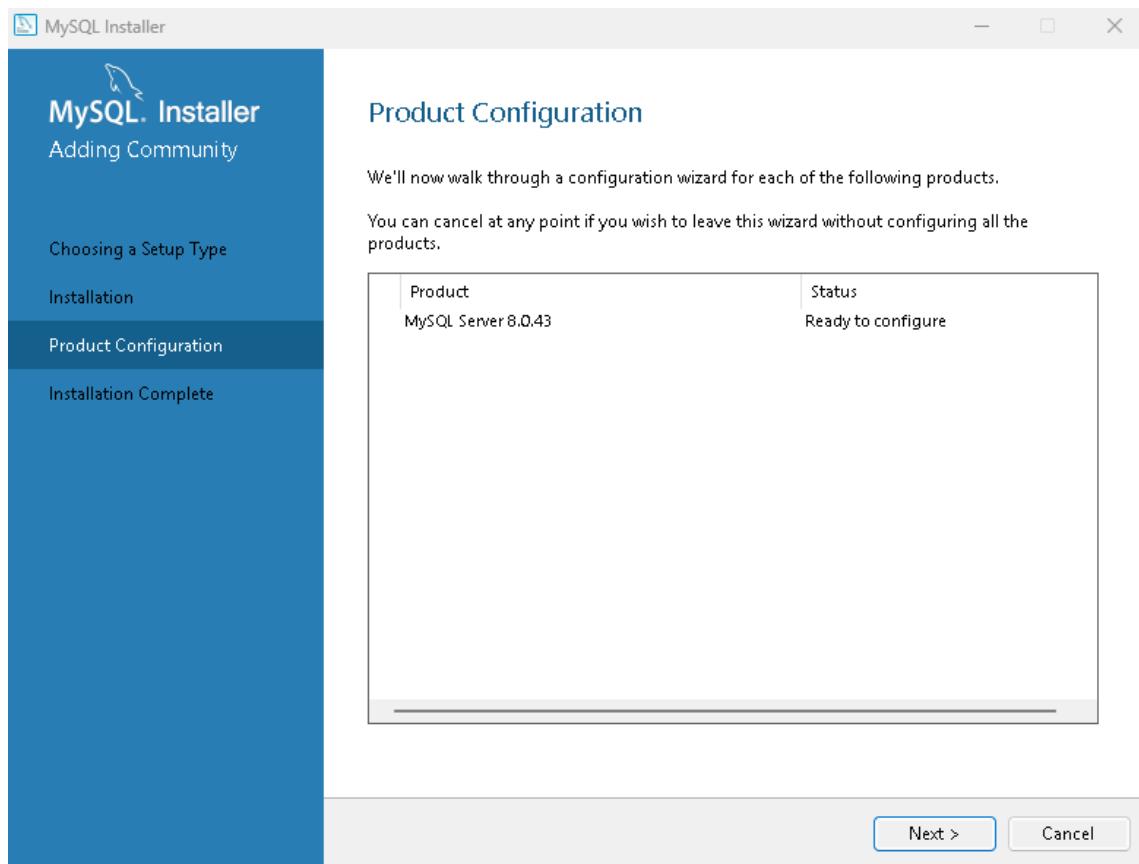
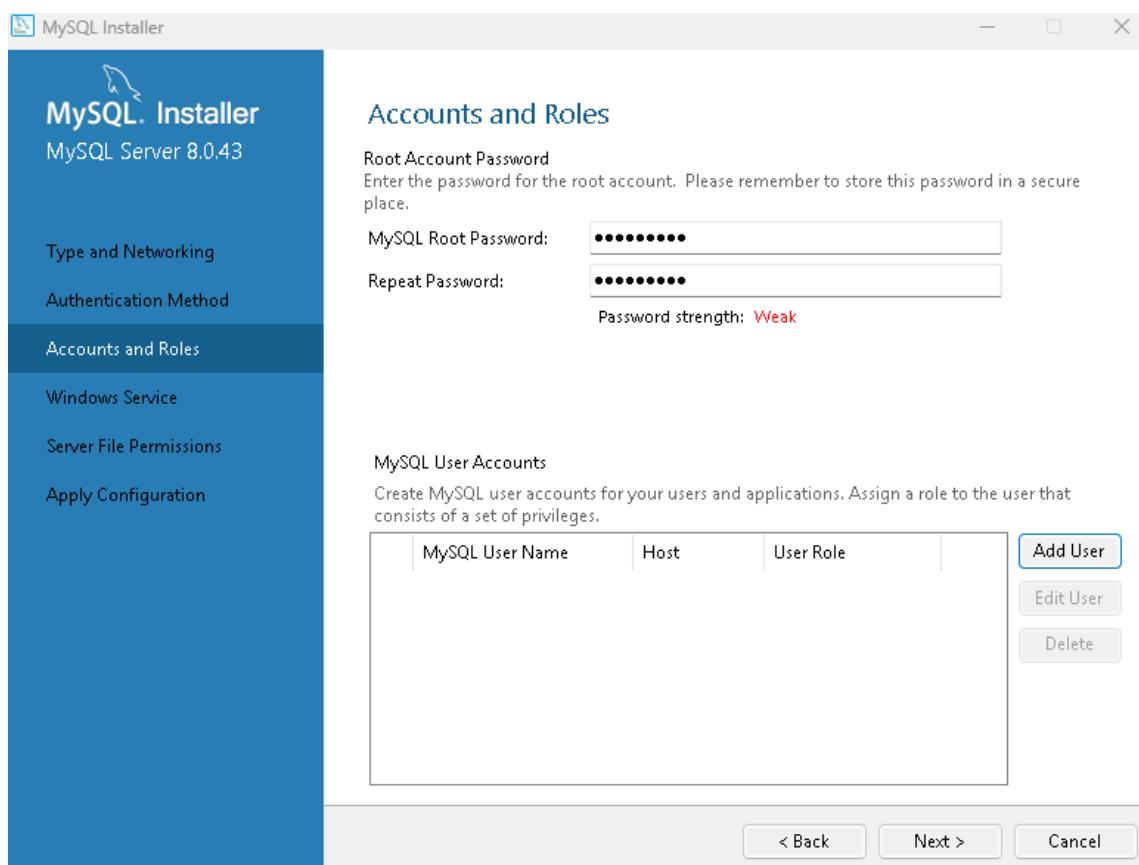
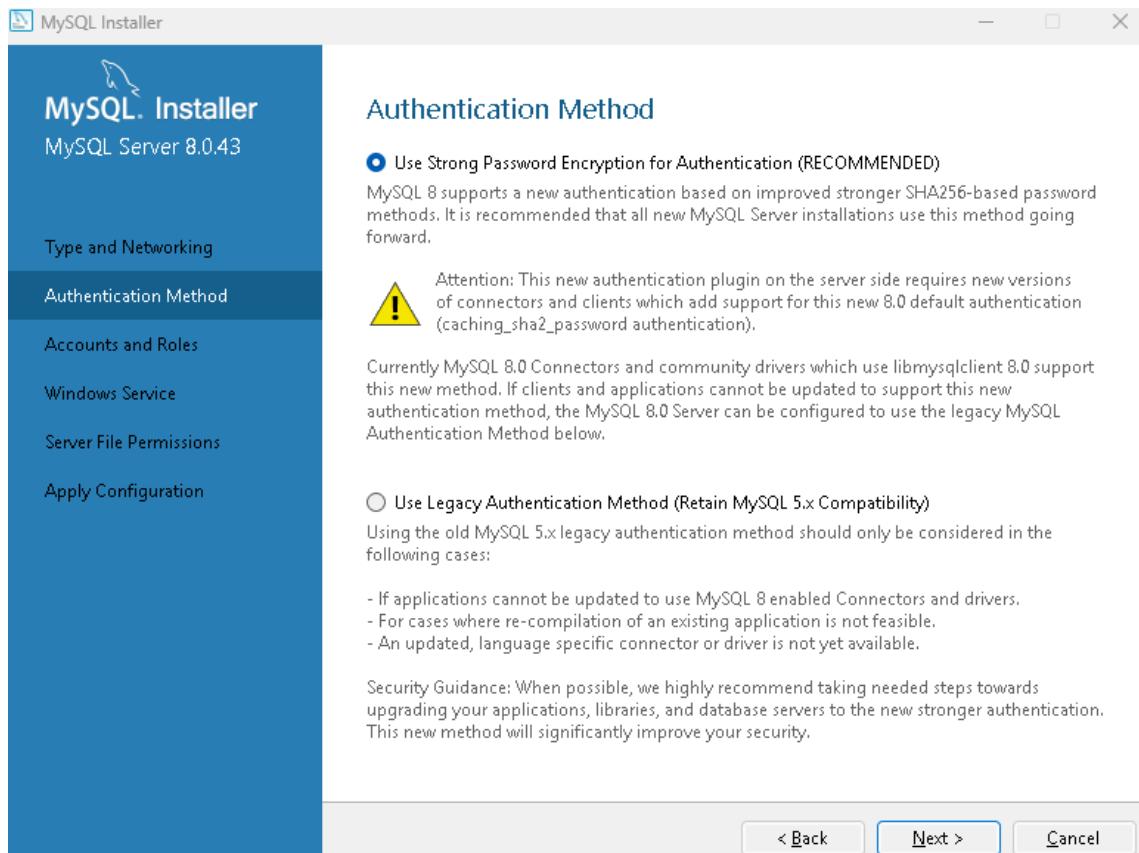


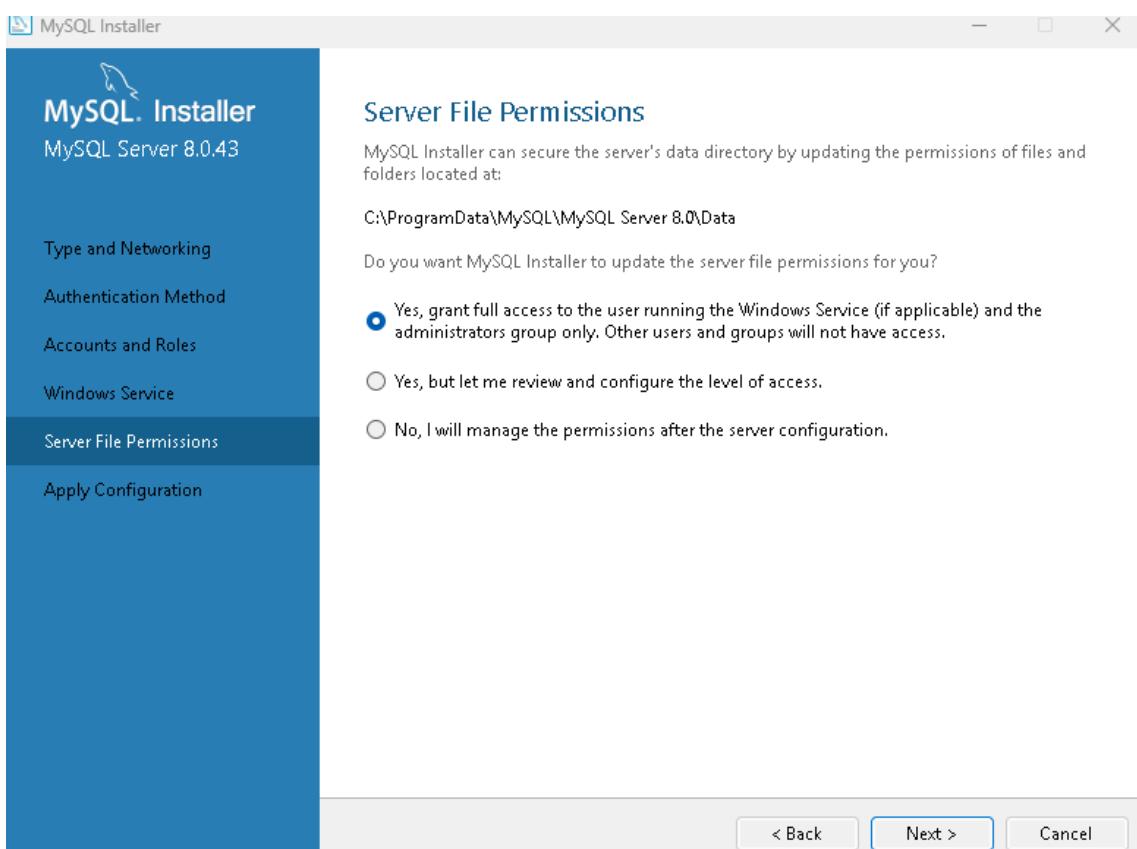
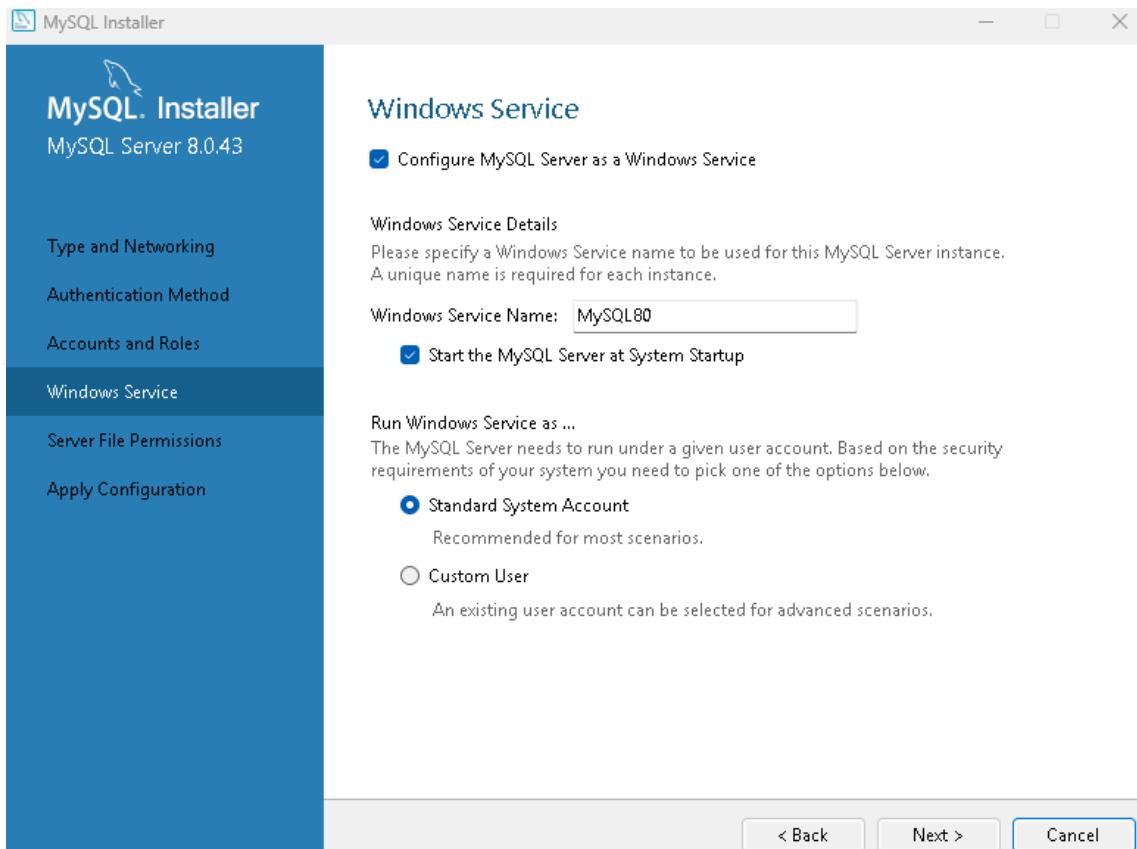
1. Instalación de MySQL Server

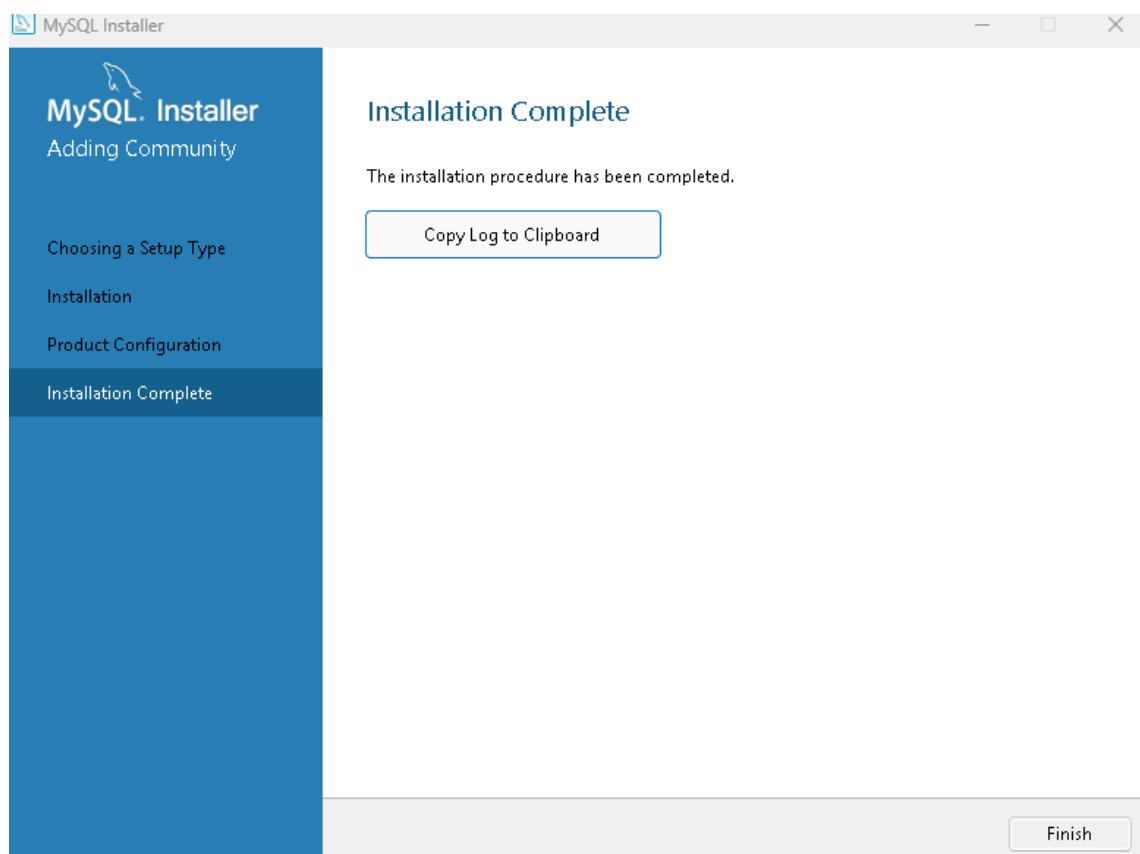
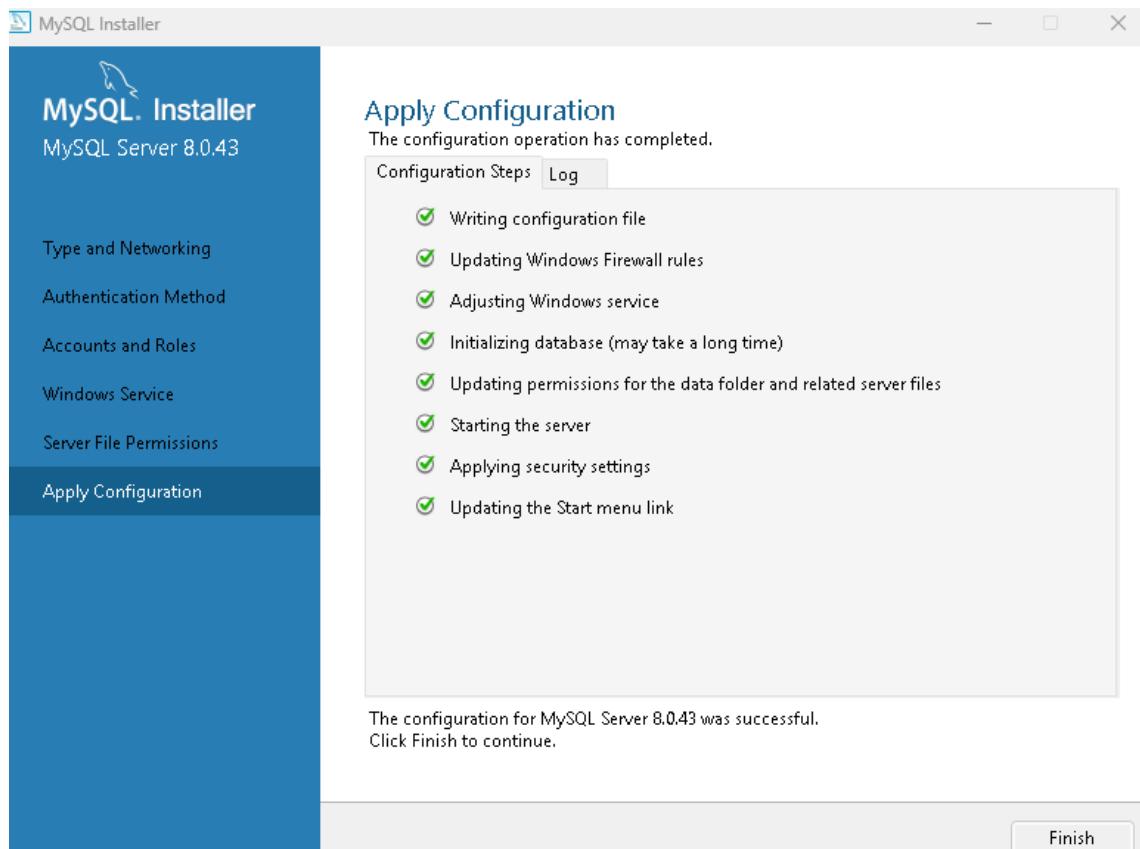




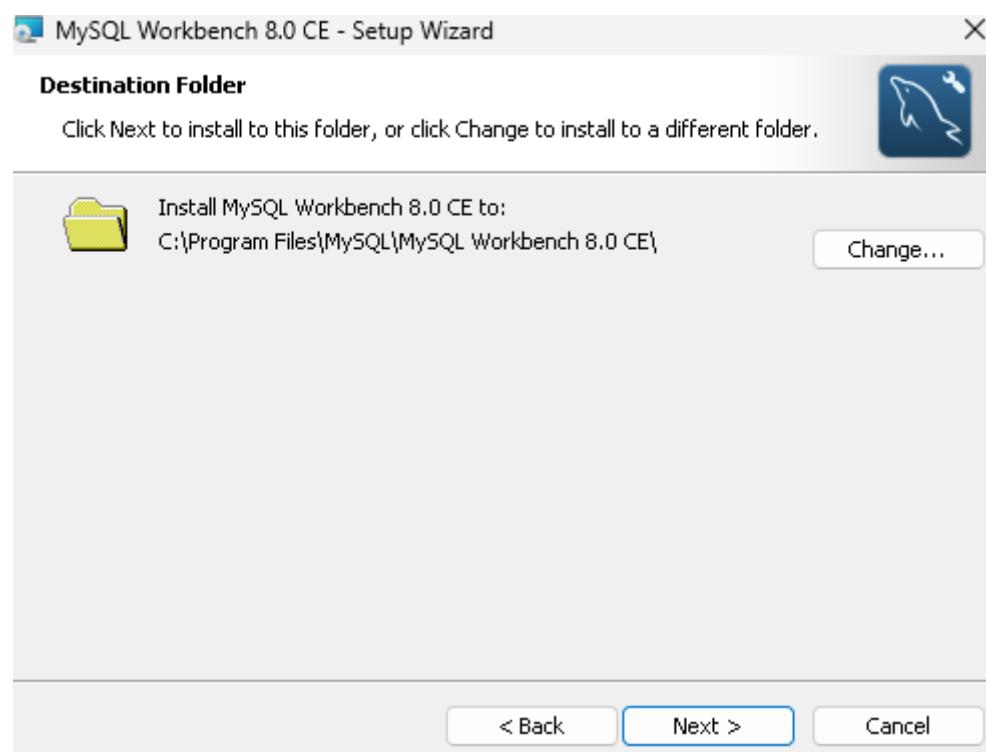
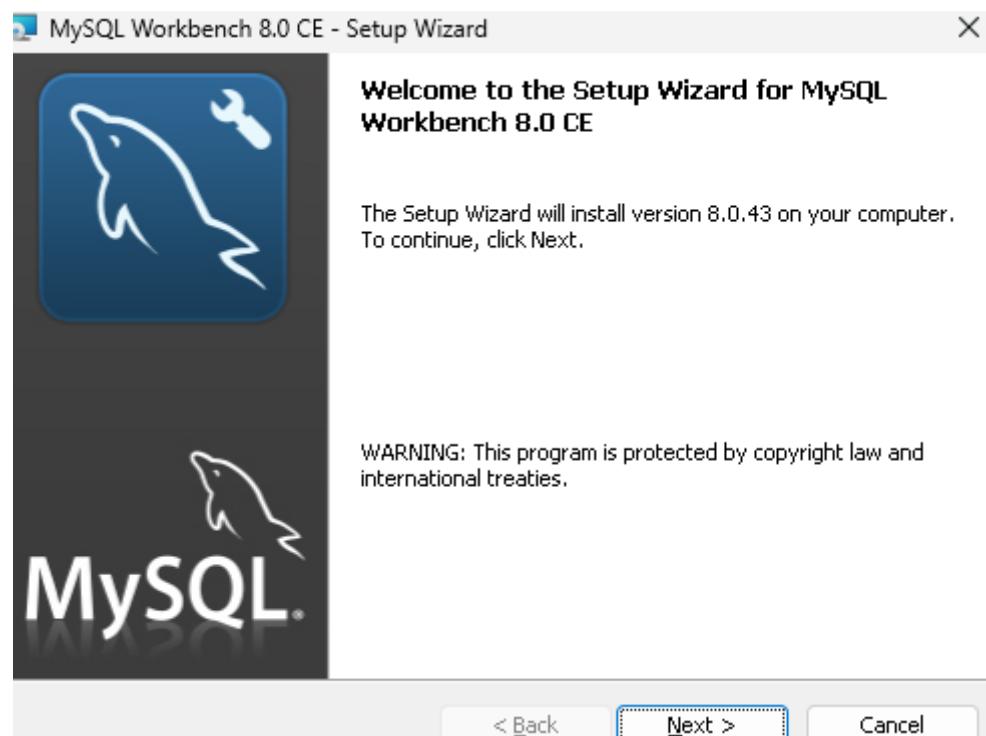


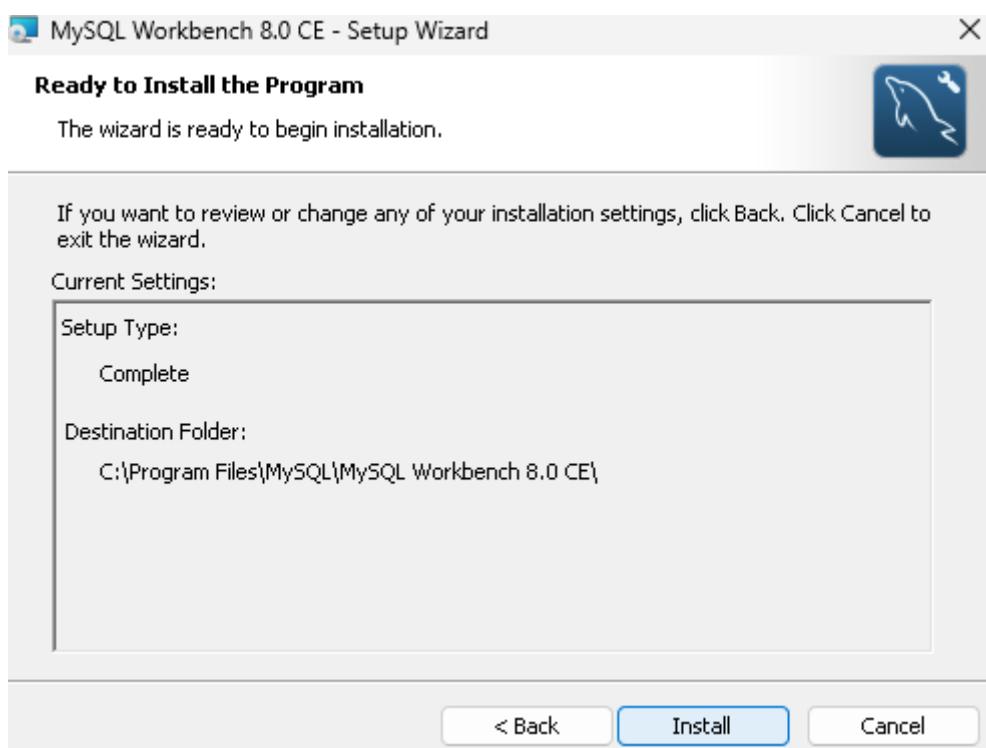
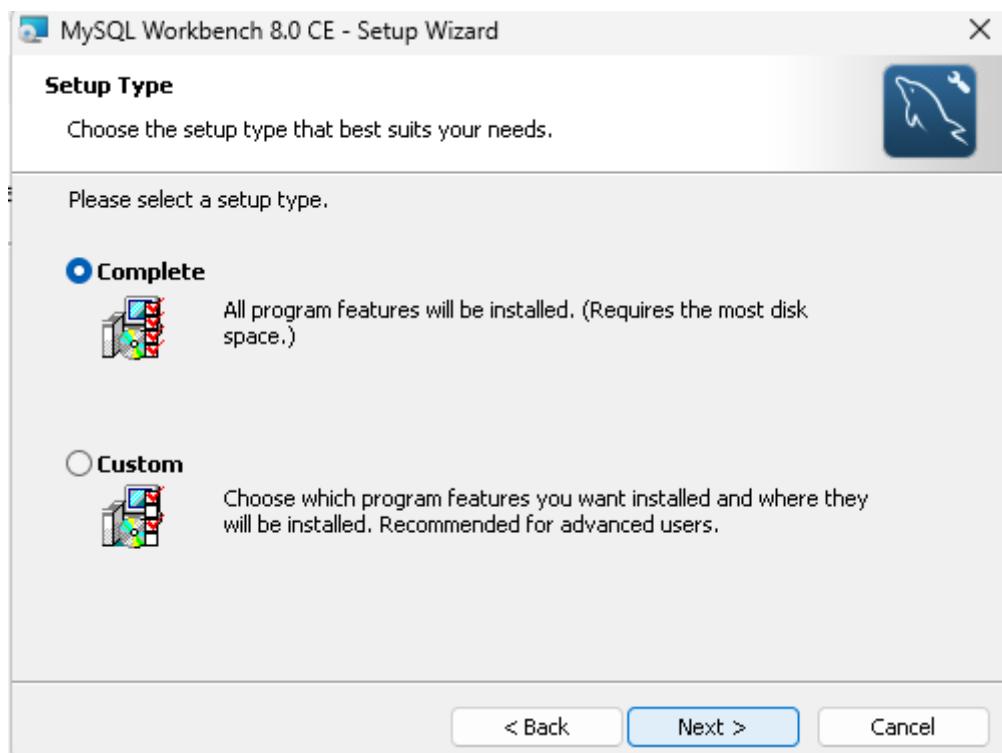


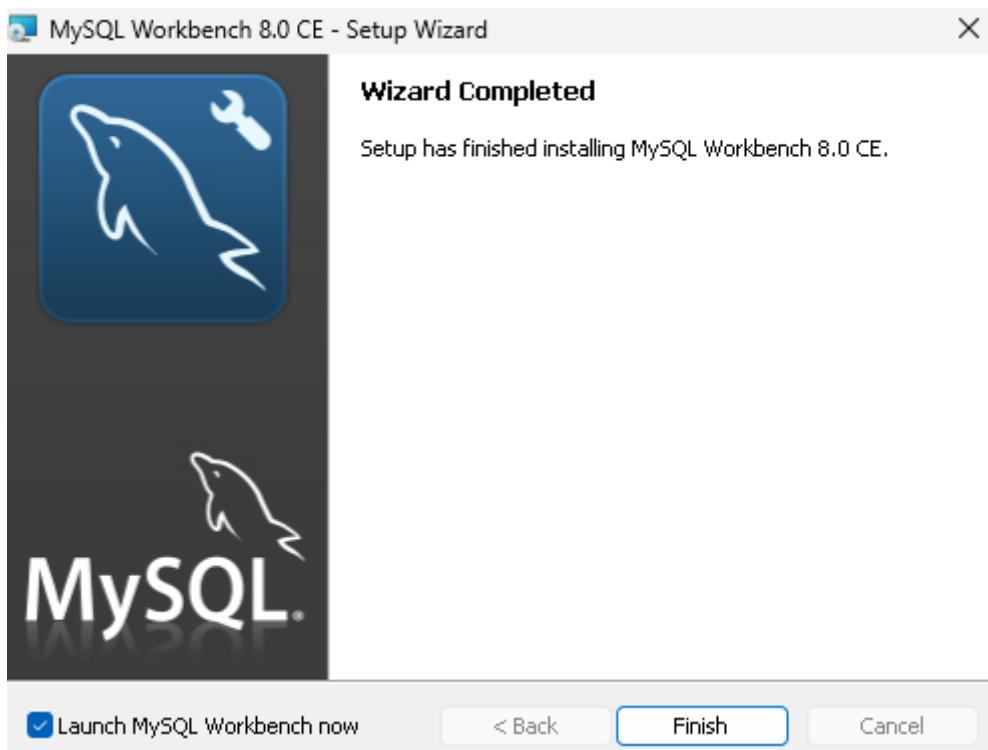




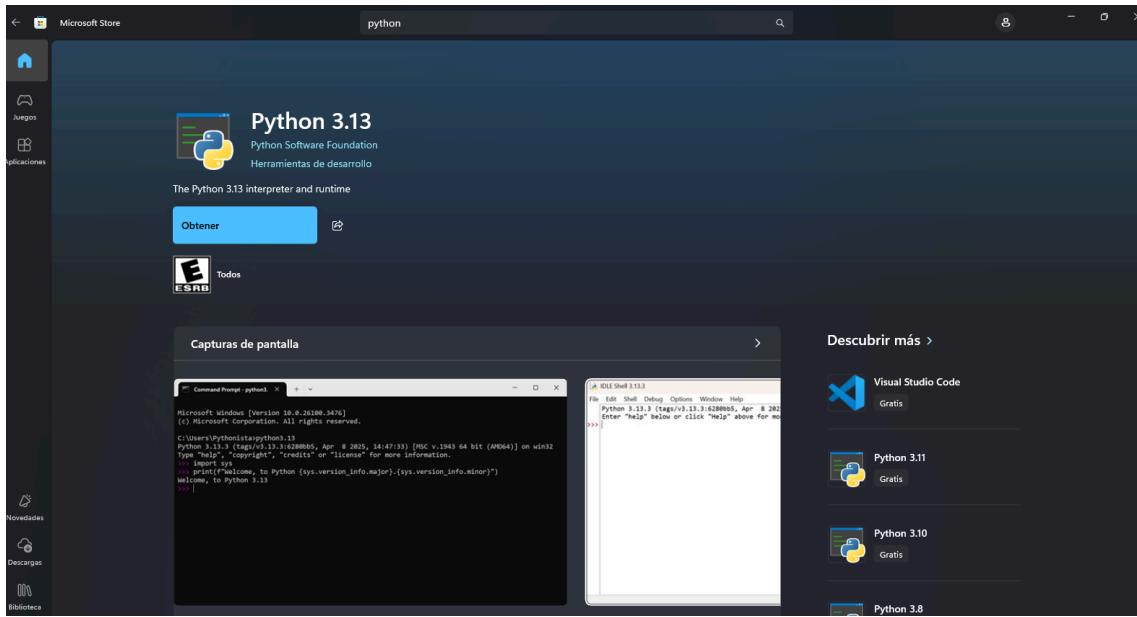
MYSQL WORKBENCH



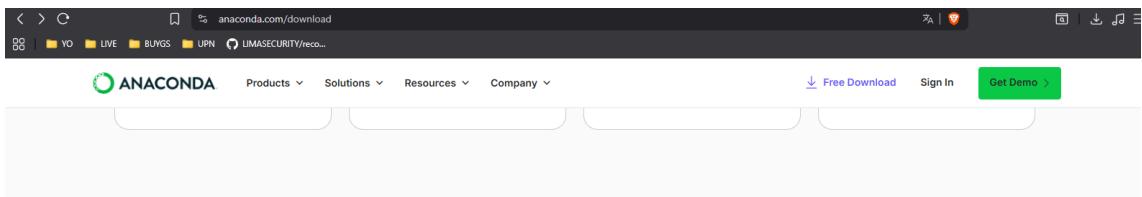




2. Instalación de Python



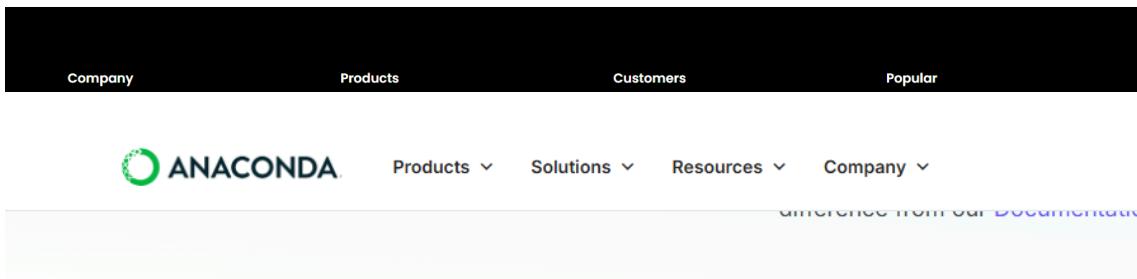
3. Instalación de Anaconda



Miniconda Installer

Miniconda is a free minimal installer for conda. It is a small bootstrap version of Anaconda that includes only conda, Python, the packages they both depend on, and a small number of other useful packages (like pip, zlib, and a few others).

[Download Miniconda Installer >](#)



Distribution Installers

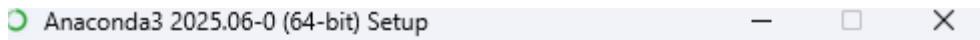
[Download](#)

For installation assistance, refer to [troubleshooting](#).

Windows

Mac

Linux



Welcome to Anaconda3 2025.06-0 (64-bit) Setup



Setup will guide you through the installation of Anaconda3 2025.06-0 (64-bit).

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.

[Next >](#)

[Cancel](#)



License Agreement

Please review the license terms before installing Anaconda3 2025.06-0 (64-bit).

Press Page Down to see the rest of the agreement.

By continuing installation, you hereby consent to the Anaconda Terms of Service available at <https://anaconda.com/legal>.

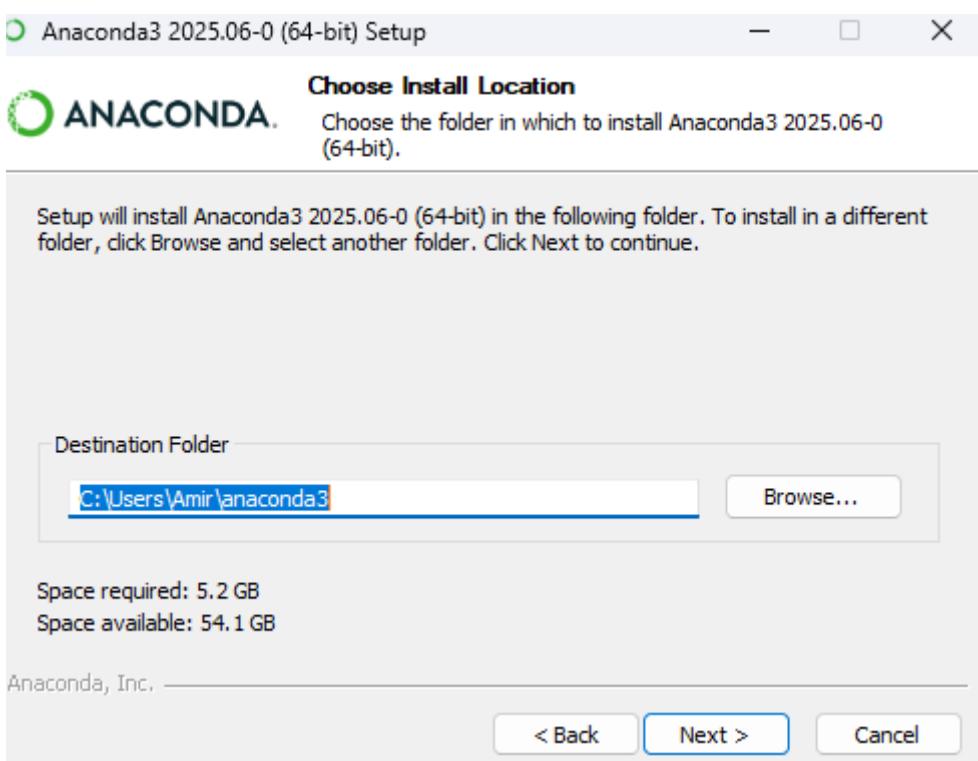
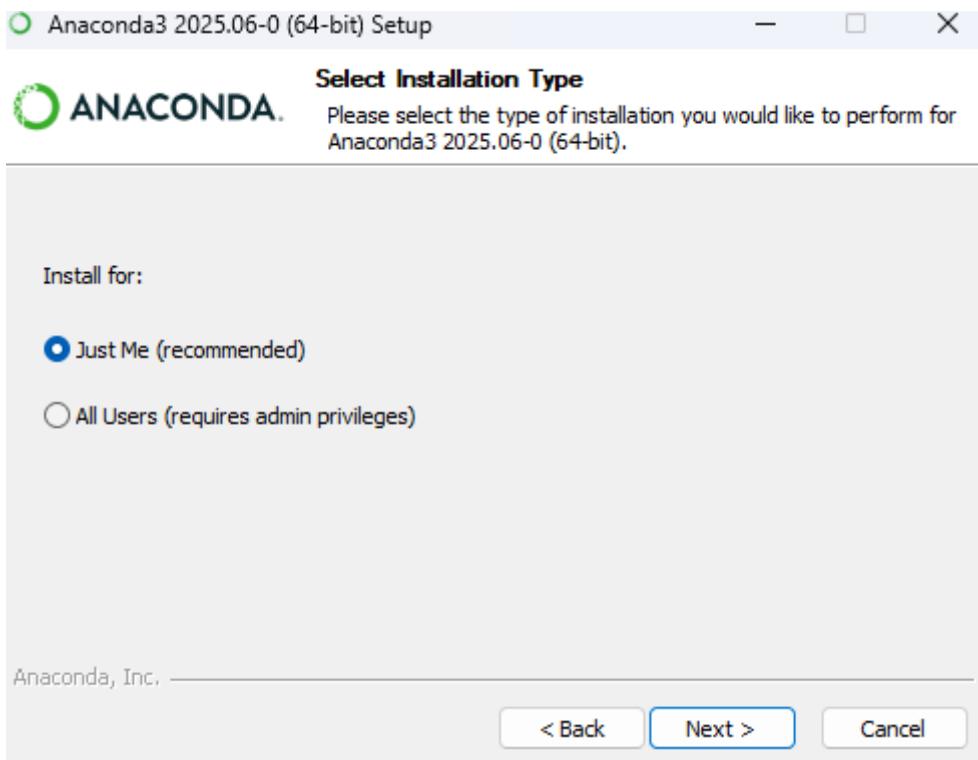
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Anaconda3 2025.06-0 (64-bit).

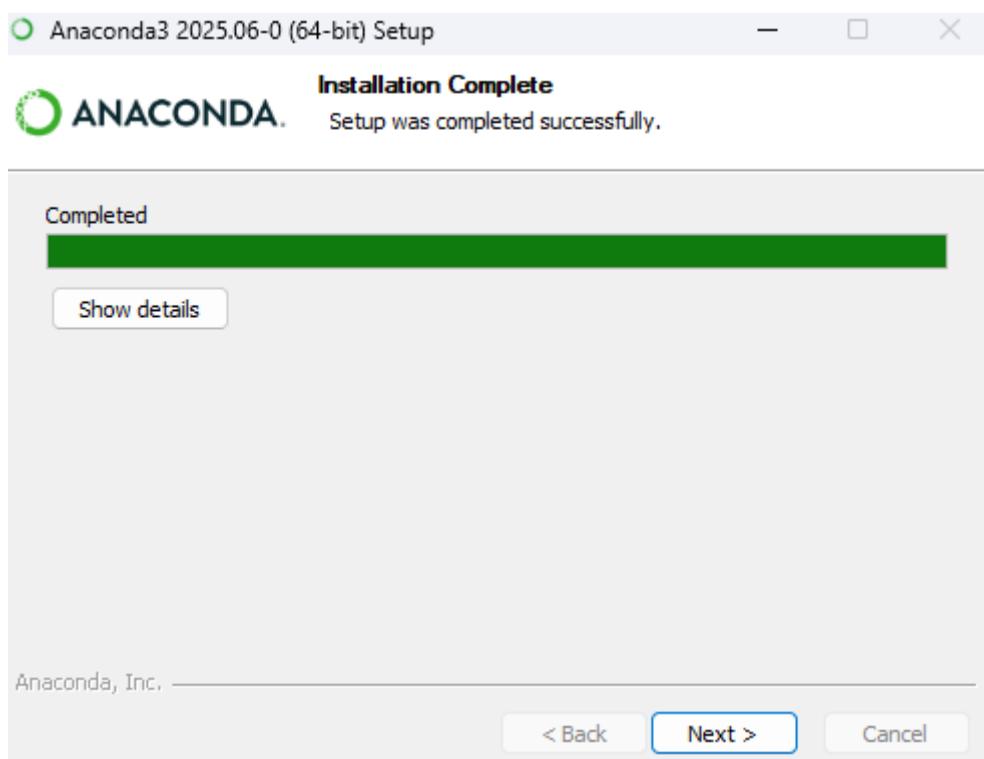
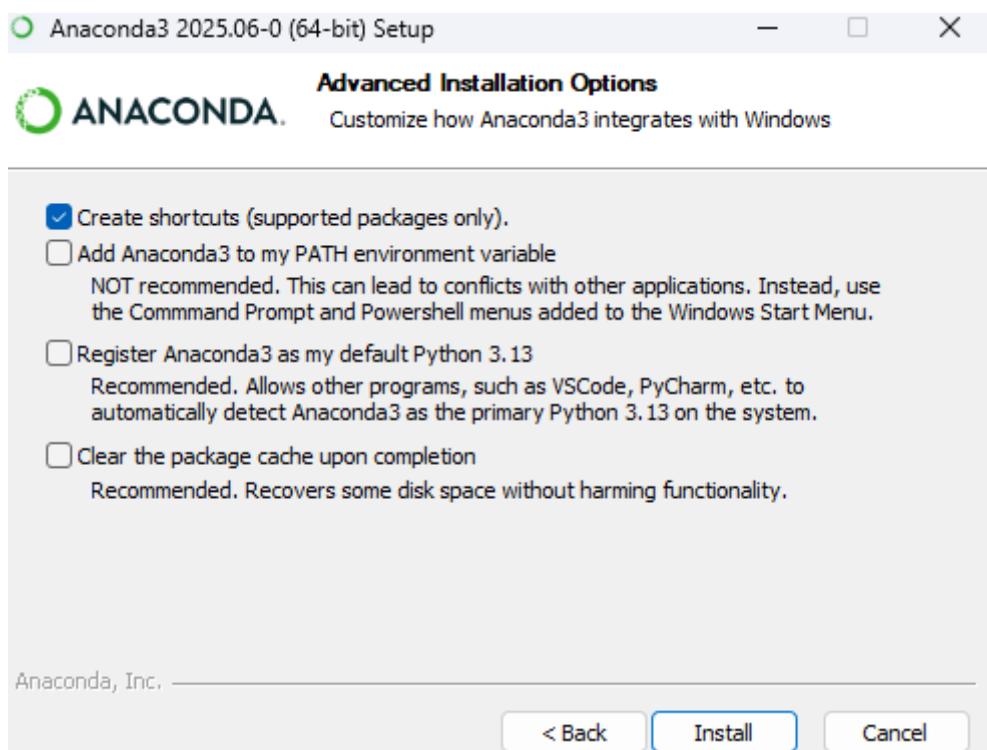
Anaconda, Inc.

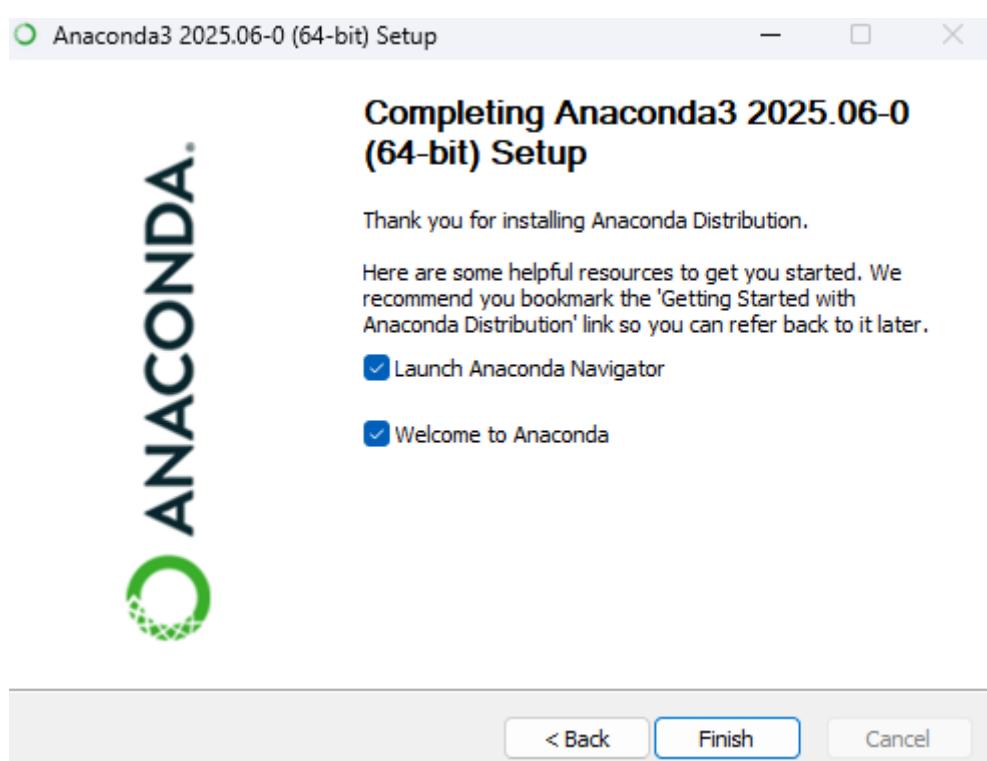
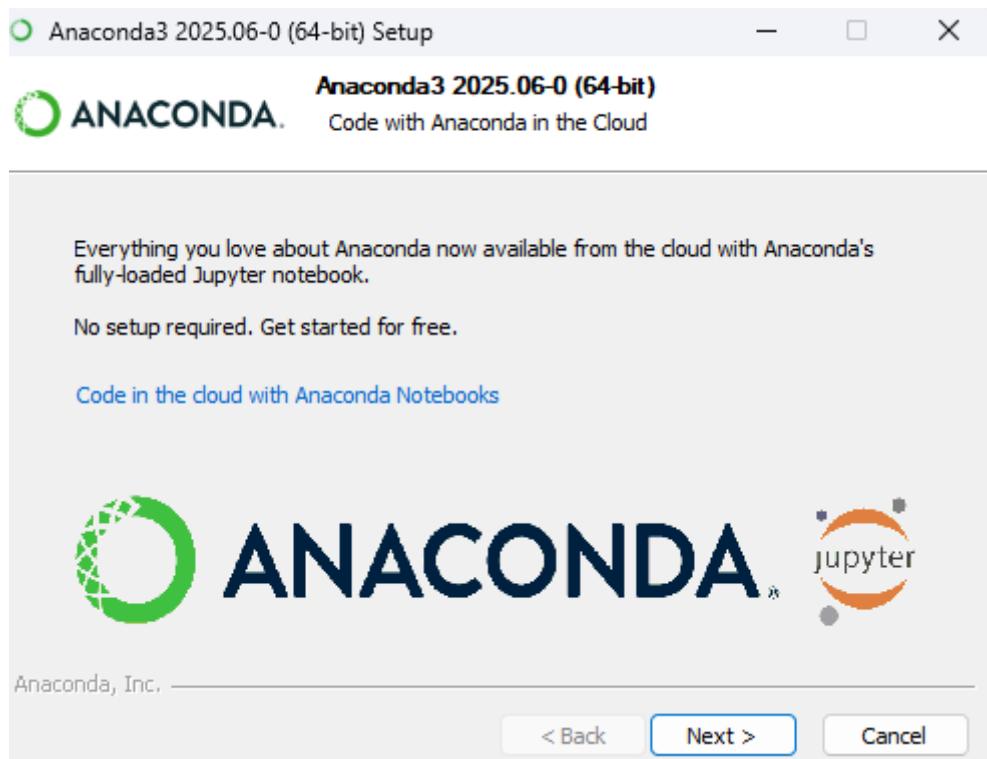
[*< Back*](#)

[I Agree](#)

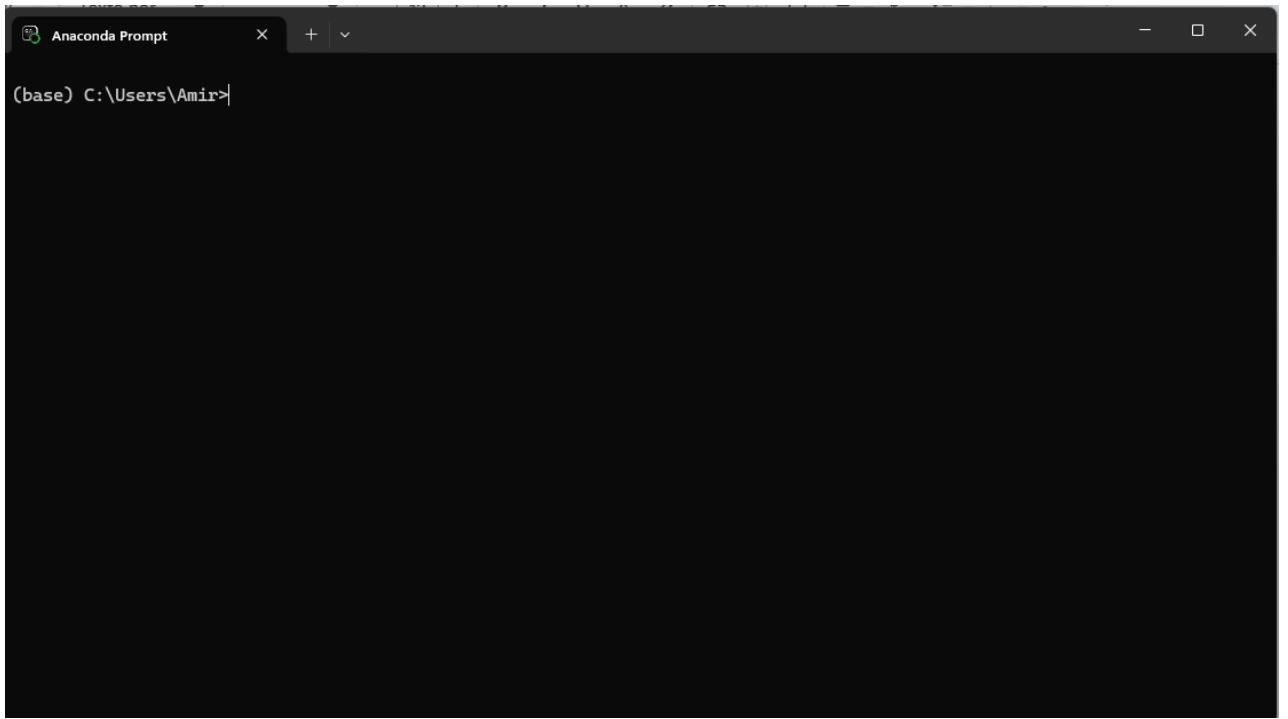
[Cancel](#)







4. Anaconda Prompt



❖ Copiar y pegar estos comandos

- Primer comando

```
cd C:\Users\Amir\Desktop\PROGRAMA
```

- Segundo comando

```
conda create -n reconocimiento-facial python=3.13
```

- Tercer comando

```
conda activate reconocimiento-facial
```

❖ Instalar librerias

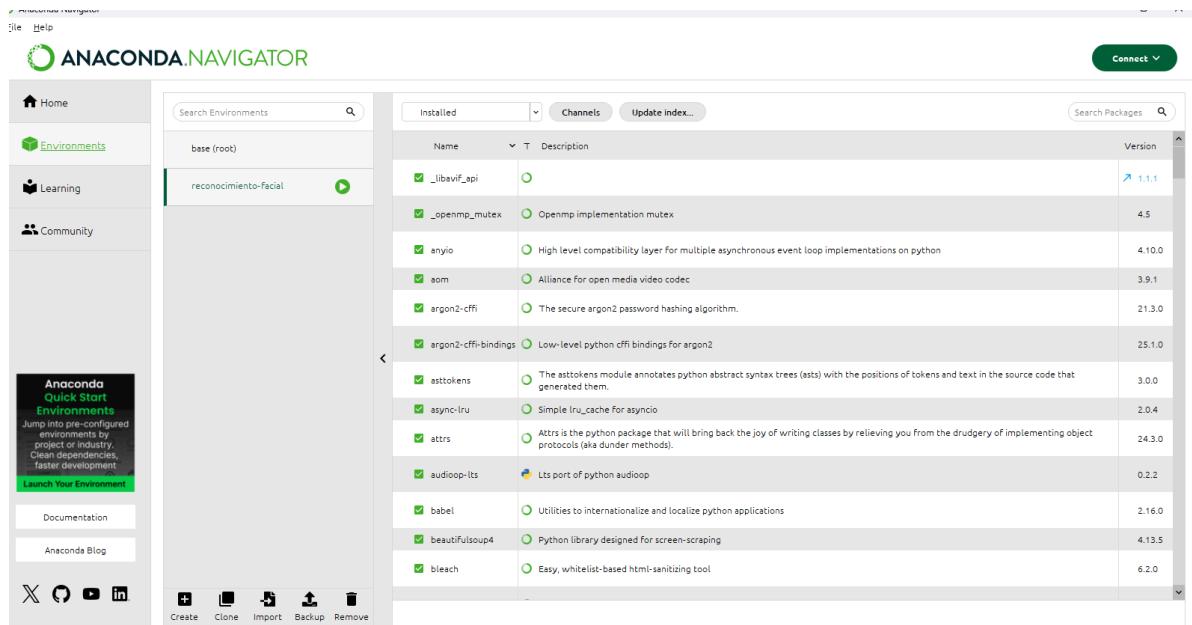
```
conda install numpy matplotlib mysql-connector-python -c conda-forge
```

```
pip install speechrecognition pytsx3 pyaudio
```

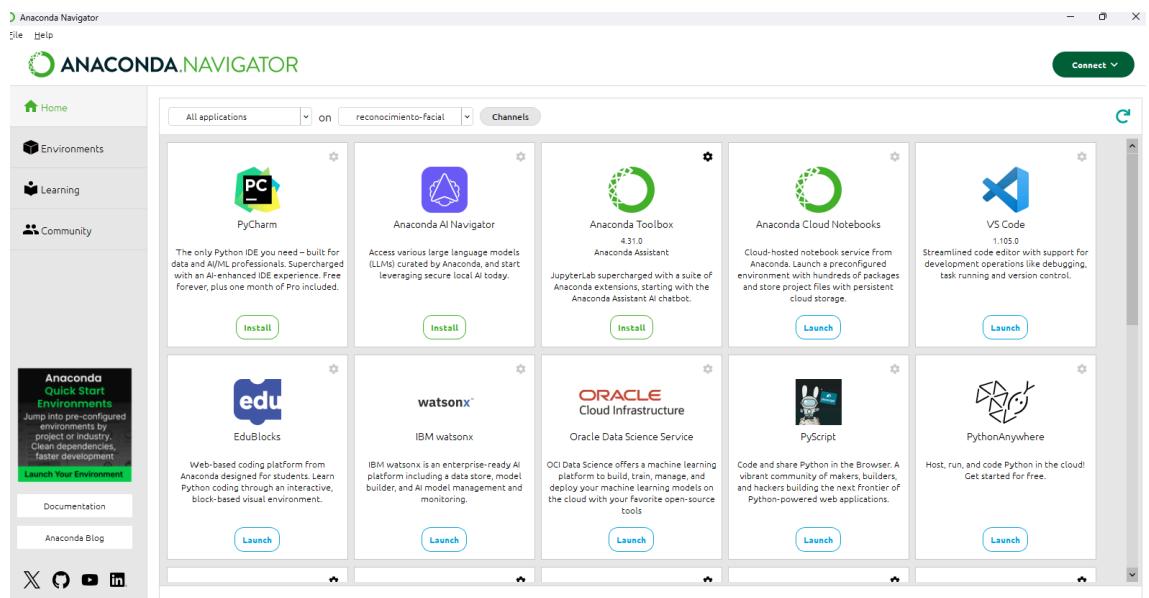
```
pip install opencv-python
```

```
pip install pywin32 pypiwin32
```

5. Iniciar el entorno virtual (reconocimiento facial)



- Instalar VS Code e iniciar



Iniciar el archivo python (main.py)

The screenshot shows a Python development environment with the following details:

- EXPLORER** pane on the left listing files: `PROGRAMA`, `_pycache_`, `venv`, `clases`, `usuarios_autorizados` (containing `Amir Urbano.jpg`), `web_admin`, `config.py`, and `main.py`.
- main.py** code editor pane showing the following Python code:

```
import config

class FacialRecognitionSystem:
    def __init__(self):
        print("INICIANDO SISTEMA DE RECONOCIMIENTO FACIAL")
        print("-" * 60)

        # Inicializar componentes
        self.db = DatabaseManager()
        self.face_recognition = FacialRecognition(self.db)
        self.email_sender = EmailsSender(self.db)
        self.voice_handler = VoiceHandler()
        self.web_server = WebServerManager(self.db)
        # Pasar email_sender al AuthSystem
        self.auth_system = AuthSystem(self.db, self.face_recognition, self.email_sender)

    # Verifican e inicializan base de datos
    if self.db.test_connection():
        # Solo llamar a create_tables() una vez - esto incluye create_user_table()
        self.db.create_tables()

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
```

- TERMINAL** pane at the bottom showing command-line output:

```
PS C:\Users\Amir\Desktop\PROGRAMA & C:\Users\Amir\.conda\envs\reconocimiento-facial\python.exe c:/Users/Amir/Desktop/PROGRAMA/main.py
INICIANDO SISTEMA DE RECONOCIMIENTO FACIAL
=====
Cargando rostros conocidos...
✓ Amir Urbano
✓ Base de datos MySQL disponible
✓ Tabla de usuarios configurada correctamente
✓ Tablas creadas/verificadas exitosamente

SISTEMA DE RECONOCIMIENTO FACIAL
=====
1. 🗝 Iniciar sesión
2. 🚪 Salir del sistema

Seleccione opción:
```