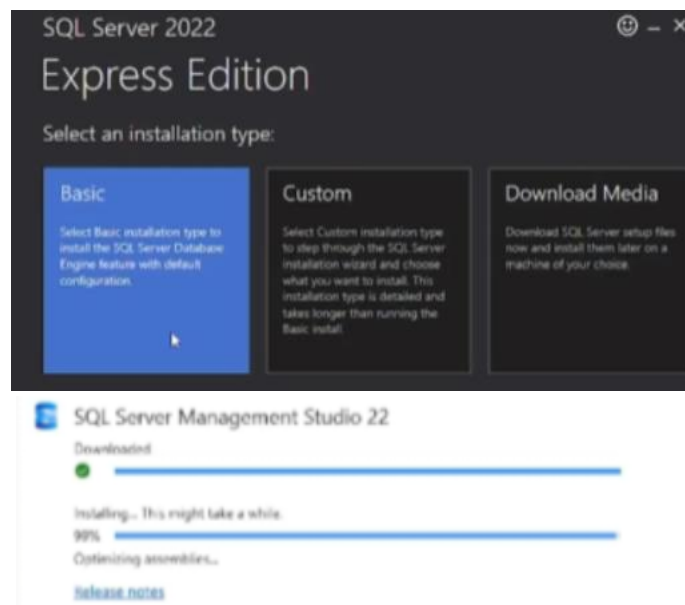


- **Step 1:** Install Python 3.13 from python.org and ensure it is added to the system PATH.



- **Step 2:** Install Microsoft SQL Server Express and SQL Server Management Studio (SSMS).



- **Step 3:** Using SSMS, run the StrongPass DB Creation.sql script (this will create the database and all the required tables), connect to SQL express service on PC (.\ refers to the current PC), Authenticate with Windows Credentials, Optional Encryption, Trust Server Certificate, Connect

Server Name	.\sqlexpress
Authentication	Windows Authentication
User Name	DESKTOP-THCKLD8\sa
Password	
	☐ Remember Password
Database Name	<default>
Encrypt	Optional
	☒ Trust Server Certificate

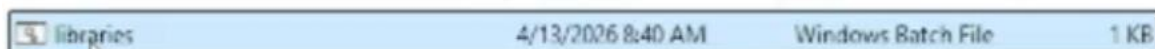
Open the SQL query saved in the requirements folder and execute

```

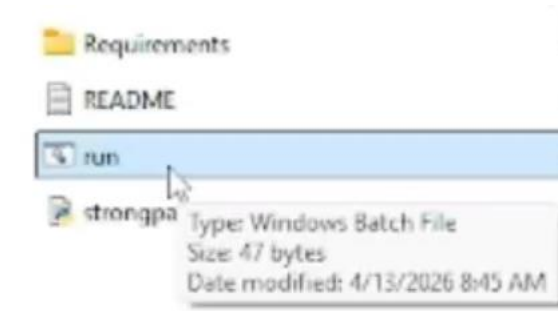
StrongPass D...KLD8\sa (73)
1  -- 1. Create the database container
2  CREATE DATABASE StrongPass;
3  GO
4
5  -- 2. Tell the system to use the new database for the following command
6  USE StrongPass;
7  GO
8
9  -- 3. Create the MasterUsers table
10 CREATE TABLE MasterUsers (
11     UserID INT PRIMARY KEY IDENTITY(1,1),
12     Username NVARCHAR(100) UNIQUE NOT NULL,
13     PasswordHash VARBINARY(MAX) NOT NULL,
14     Salt VARBINARY(MAX) NOT NULL
15 );
16
17 -- 4. Create the Passwords table
18 CREATE TABLE Passwords (
19     PasswordID INT PRIMARY KEY IDENTITY(1,1),
20     UserID INT FOREIGN KEY REFERENCES MasterUsers(UserID),
21     AppName NVARCHAR(100) NOT NULL,
22     Username NVARCHAR(100) NOT NULL,
23     EncryptedPassword VARBINARY(MAX) NOT NULL
24 );
25
26 -- 5. Create the AuditLogs table
27 CREATE TABLE AuditLogs (
28     LogID INT PRIMARY KEY IDENTITY(1,1),
29     PasswordID INT FOREIGN KEY REFERENCES Passwords(PasswordID),
30     UserID INT FOREIGN KEY REFERENCES MasterUsers(UserID),
31     ActionType NVARCHAR(50) NOT NULL,
32     ActionDate DATETIME DEFAULT GETDATE()
33 );

```

- **Step 4:** Install Python dependencies: pip install customtkinter cryptography requests pyodbc (this is facilitated by that .bat file in the requirements folder)



- **Step 5:** Run the application: py strongpass.py or open run.batch



- **Step 6:** On first launch, use the 'Create Master Account' button to register a master account with a password of at least 12 characters.

