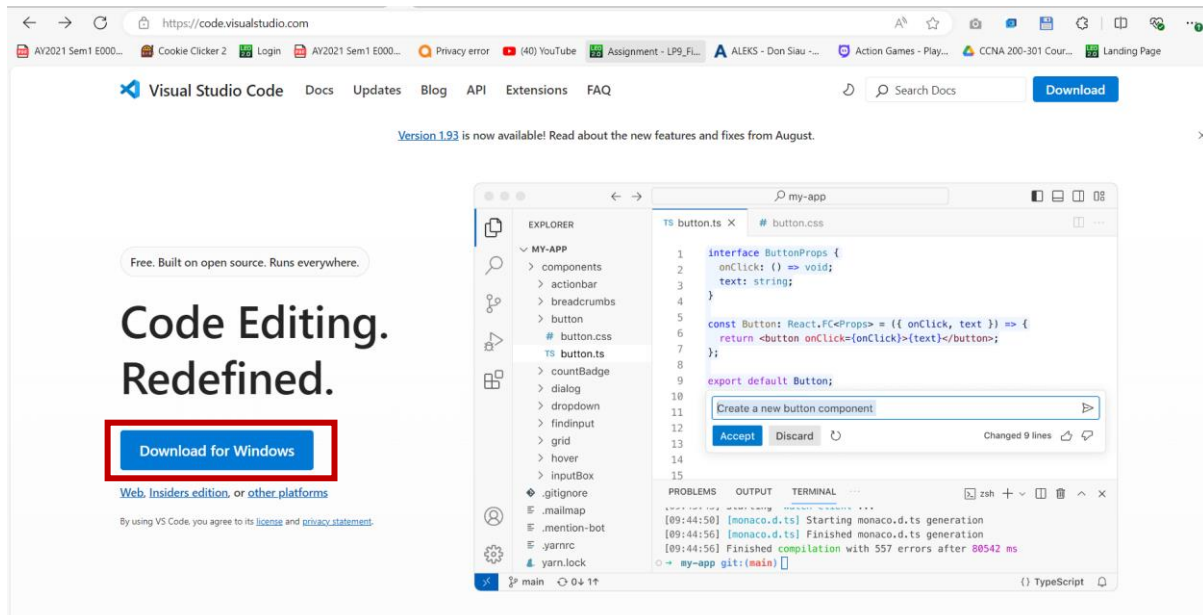


GitHub Link: https://github.com/DonSiau/SQL_Grading.git

Prerequisites:

1)Visual Studio Code (VSC):

https://code.visualstudio.com/?wt.mc_id=vscom_downloads



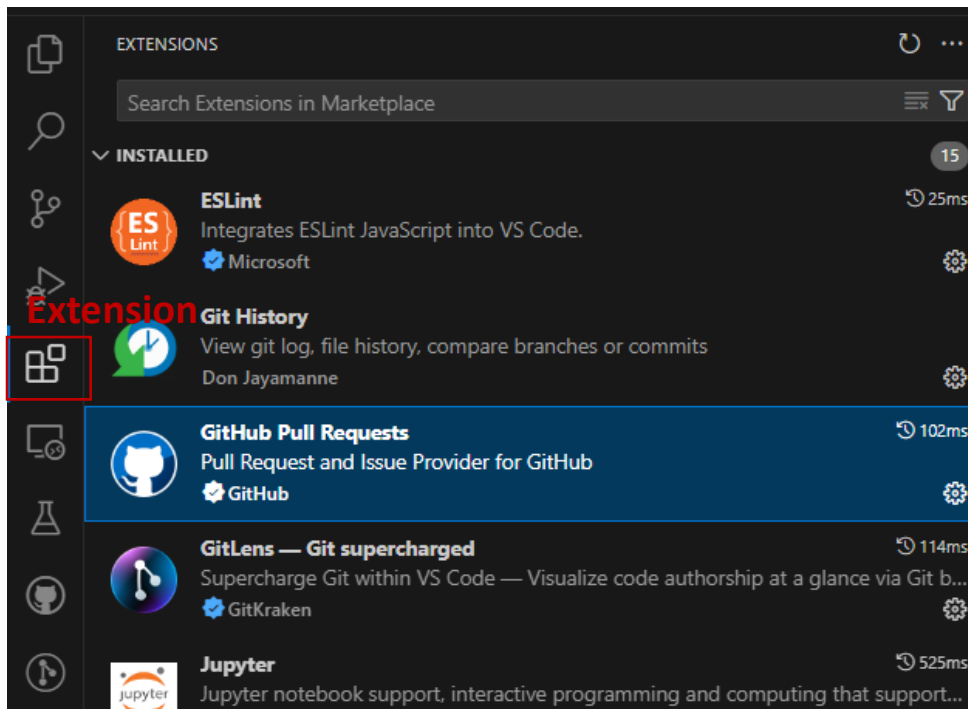
2)Python 3.12.3 [Python Release Python 3.12.3 | Python.org](https://www.python.org/release/python-3.12.3/)

Scroll down on the website to see download files, and download the version highlighted in red

A screenshot of the Python 3.12.3 release page on python.org. The page shows the 'Files' section with a table of download links. The row for 'Windows installer (64-bit)' is highlighted with a red box. The table has columns for Version, Operating System, Description, MD5 Sum, File Size, GPG, Sigstore, and SBOM.

Version	Operating System	Description	MD5 Sum	File Size	GPG	Sigstore	SBOM
Gzipped source tarball	Source release		3c5498a34d5226c9b746b1199f0bf2d9	25.9 MB	SIG	.sigstore	SPDX
XZ compressed source tarball	Source release		8defb33f0c37aa4bdd3a38ba52abde4e	19.7 MB	SIG	.sigstore	SPDX
macOS 64-bit universal2 installer	macOS	for macOS 10.9 and later	6114a3bb9b288f23ab38dbbb959be1bf	43.6 MB	SIG	.sigstore	
Windows installer (64-bit)	Windows	Recommended	c86949710e0471a065db970290819489	25.5 MB	SIG	.sigstore	
Windows installer (32-bit)	Windows		a95c4fbdce0b6a22ca7cfb450f57c616	24.2 MB	SIG	.sigstore	
Windows installer (ARM64)	Windows	Experimental	ef016521b5a147f3ded730801d36a350	24.7 MB	SIG	.sigstore	
Windows embeddable package (64-bit)	Windows		38cce2bf5b4de76db19a31f46a0720de	10.5 MB	SIG	.sigstore	
Windows embeddable package (32-bit)	Windows		65d873c723db66d6746e9872df5a715e	9.4 MB	SIG	.sigstore	
Windows embeddable package (ARM64)	Windows		3229271cac55ff913aad1bb46ebc9931	9.8 MB	SIG	.sigstore	

3)Python and GitHub Pull Requests extensions: Download from VSC extensions on the Extension panel. After installed, click on the extensions and enable them



Python v2024.14.1

Microsoft microsoft.com | 136,489,645 | ★★★★★ (597)

Python language support with extension access points for IntelliSense (Pylance), Debugging (Python Debugger), linting, formatting, refactoring, unit tests, ...

[Disable](#) [Uninstall](#) [Switch to Pre-Release Version](#) ☒ Auto Update



GitHub Pull Requests v0.96.0

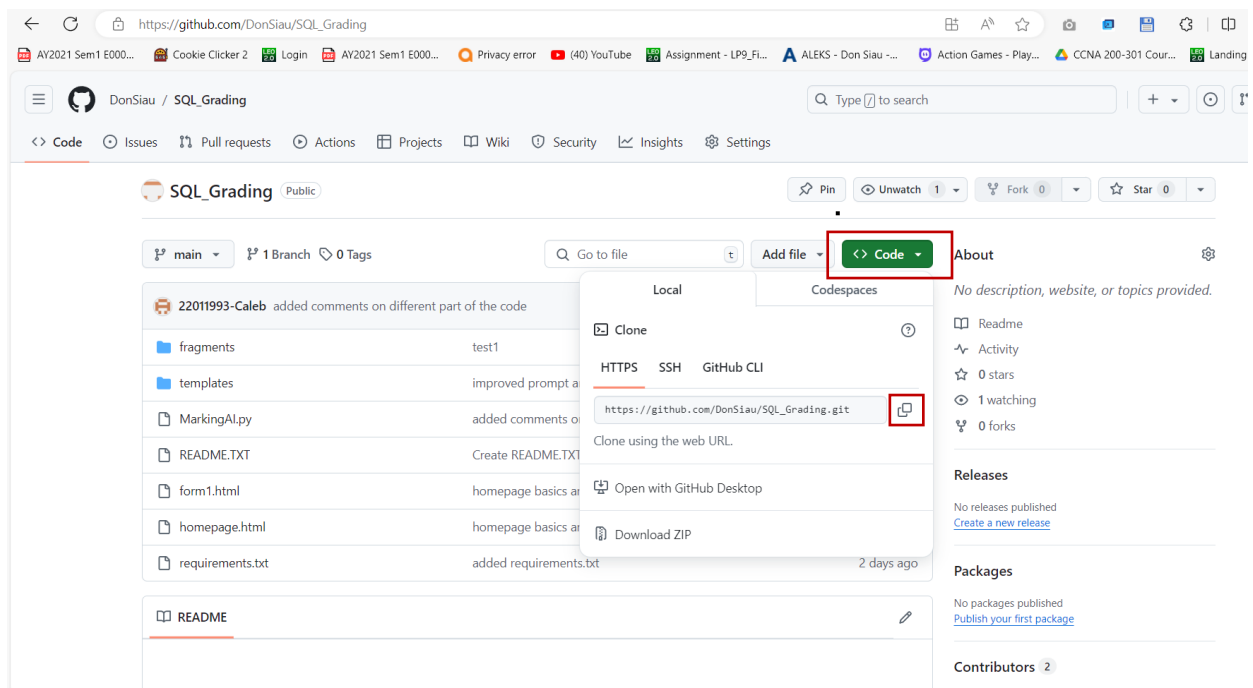
GitHub github.com | 24,352,936 | ★★★★★ (167)

Pull Request and Issue Provider for GitHub

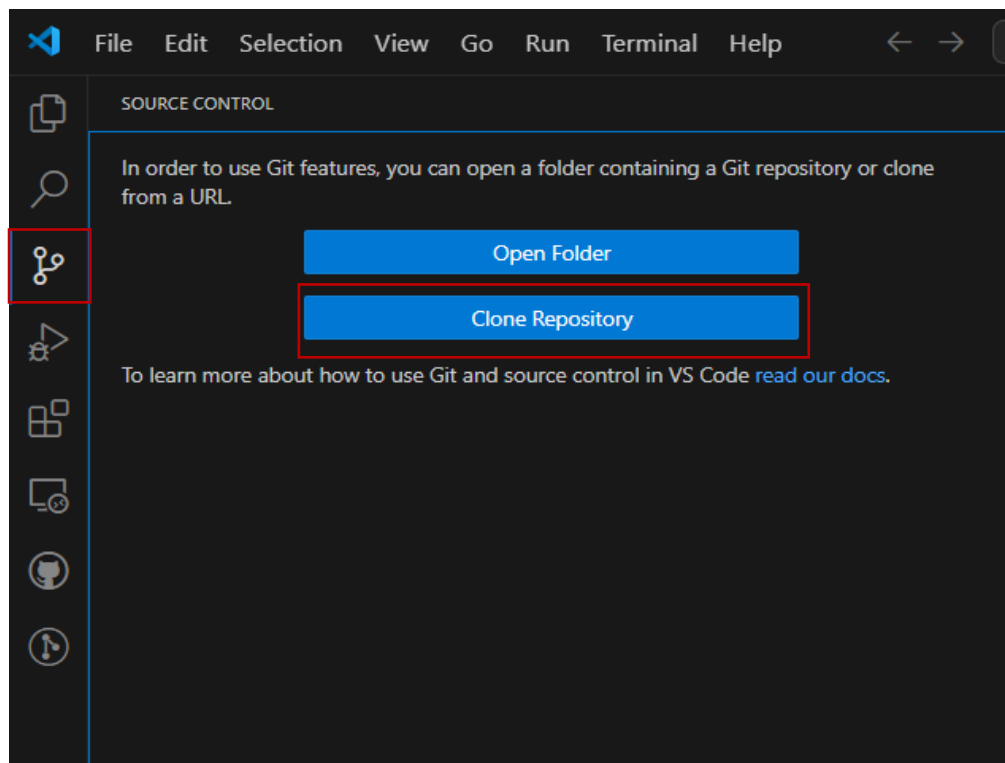
[Disable](#) [Uninstall](#) [Switch to Pre-Release Version](#) ☒ Auto Update

Installation

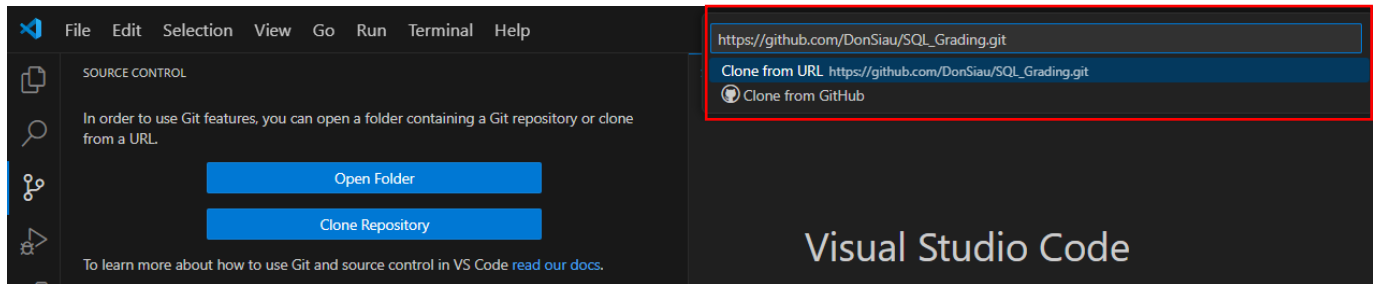
Step 1: Go to the GitHub link. Click on “Code”, then copy the HTTPS link



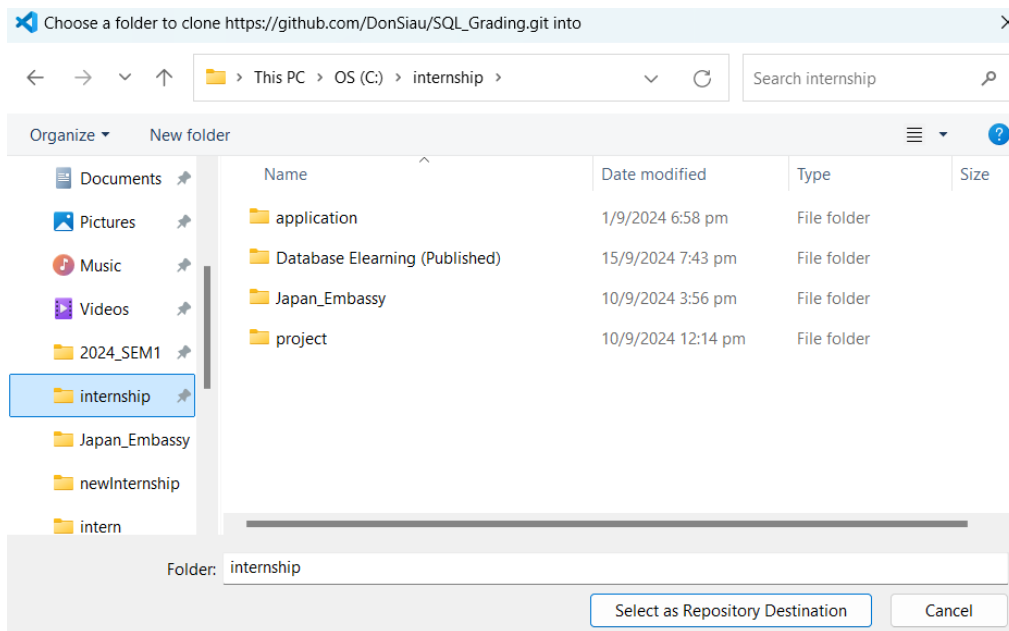
Step 2: on VSC the repository. Click the “Source control” panel and click “Clone Repository”



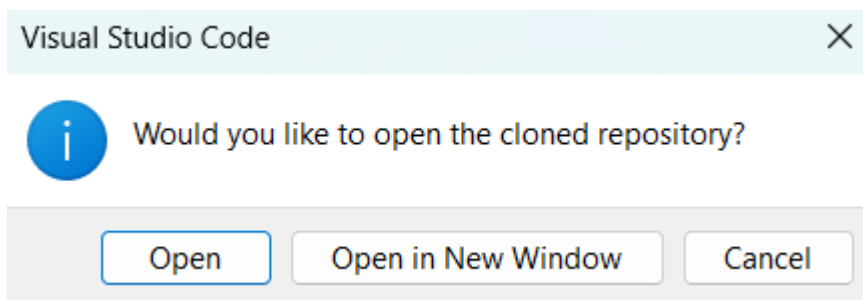
Step 3: Paste the HTTPS link into the search bar. Then press enter



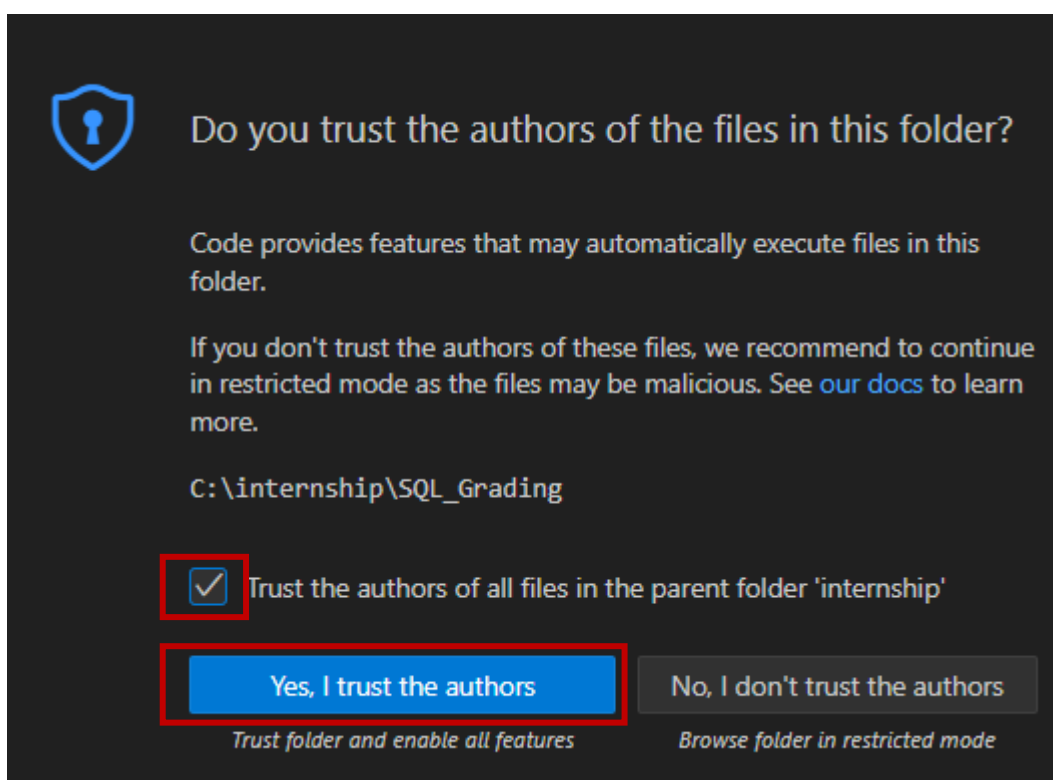
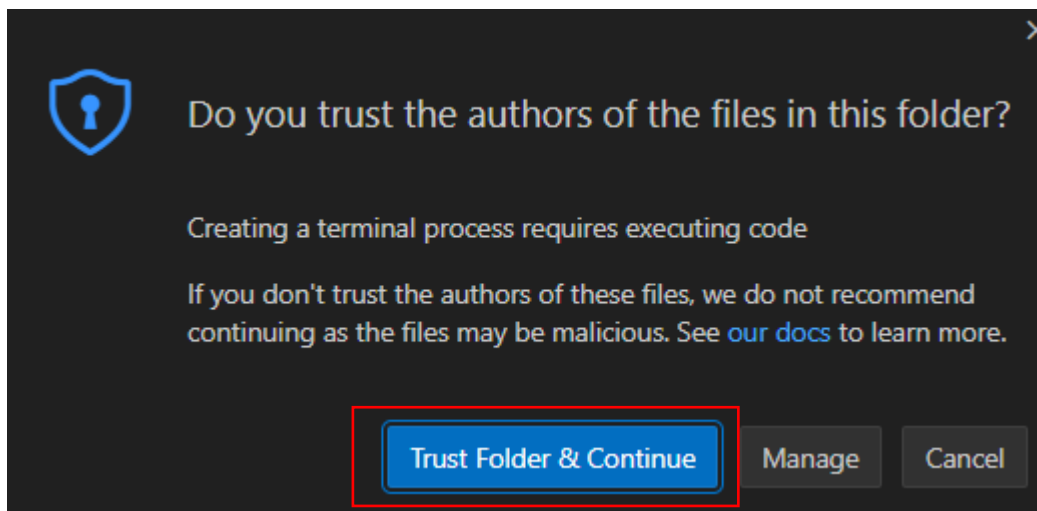
Step 4: Choose a folder to clone the repository to. Then click “Select as Repository Destination”



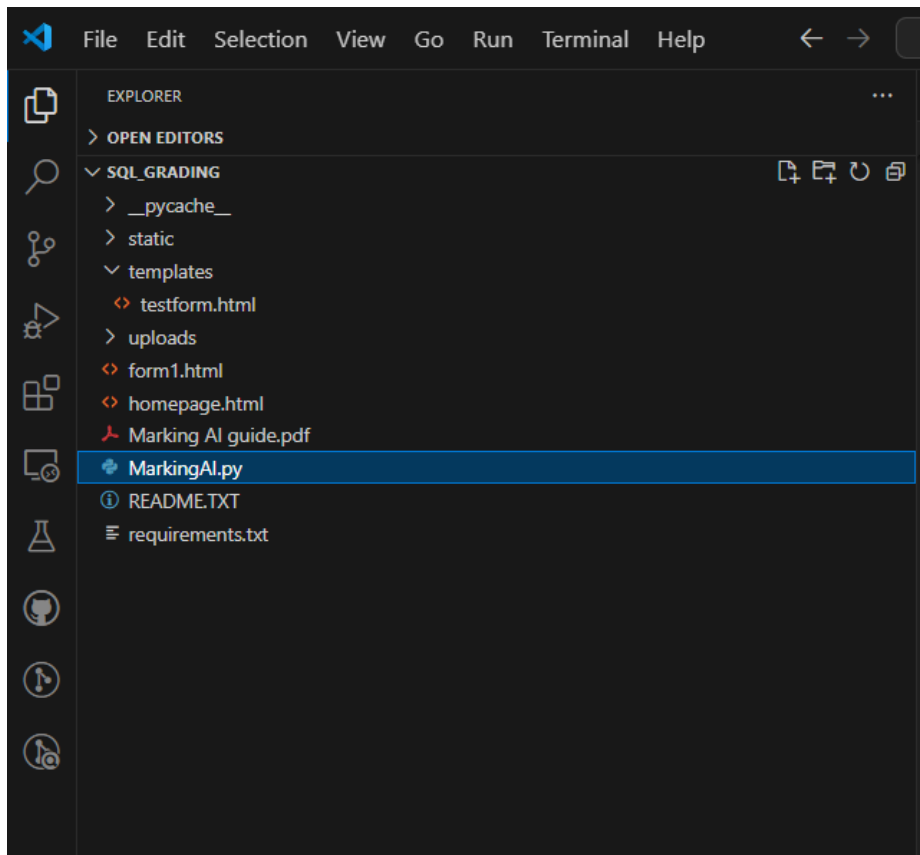
Step 5: On VSC this prompt appears. press open.



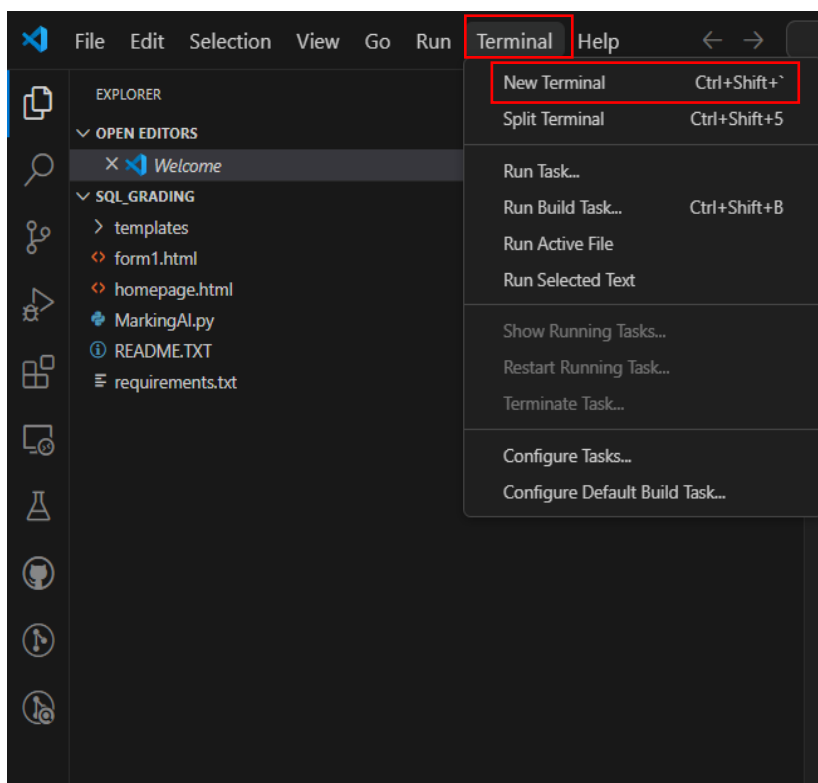
Step 6: On VSC these prompts appear. Click that you trust the authors like the images below



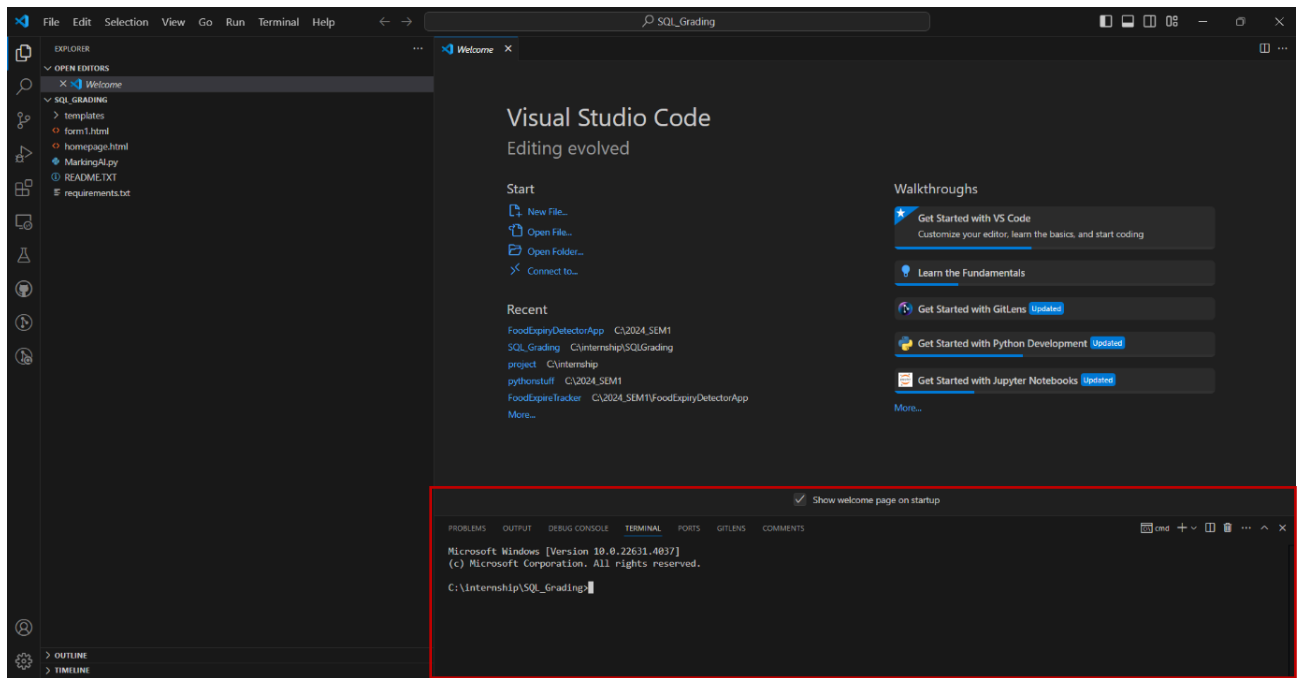
Now on the sidebar the project has been imported



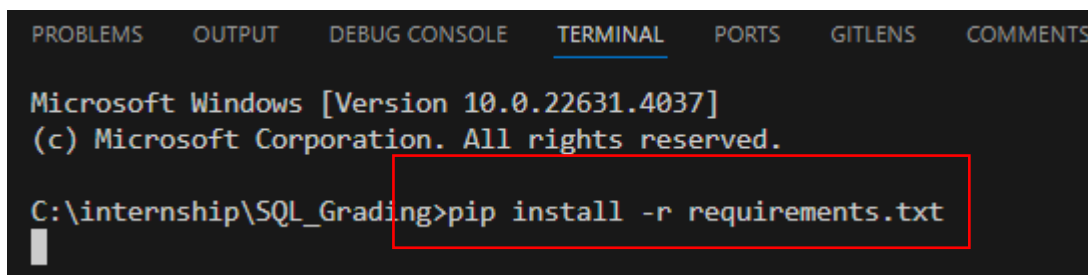
Step 7: click “Terminal” and “New Terminal”



A terminal appears at the bottom of screen



Step 8: Input “pip install -r requirements.txt” and press enter (do it in the SQL_Grading directory)



If it is not working, manually install the requirements on the SQL_Grading directory by running the commands one by one

pip install Flask==3.0.3

pip install pandas==2.2.2

pip install Requests==2.32.3

pip install openpyxl==3.1.5

Below is an example for installing Flask and Pandas manually Do the same for the other requirements if the “pip install -r requirements.txt” command does not work

```
C:\internship\SQL_Grading>pip install Flask==3.0.3
```

```
Requirement already satisfied: Flask==3.0.3 in c:\python312\lib\site-packages (3.0.3)
Requirement already satisfied: Werkzeug>=3.0.0 in c:\python312\lib\site-packages (from Flask==3.0.3) (3.0.3)
Requirement already satisfied: Jinja2>=3.1.2 in c:\python312\lib\site-packages (from Flask==3.0.3) (3.1.4)
Requirement already satisfied: itsdangerous>=2.1.2 in c:\python312\lib\site-packages (from Flask==3.0.3) (2.2.0)
Requirement already satisfied: click>=8.1.3 in c:\python312\lib\site-packages (from Flask==3.0.3) (8.1.7)
Requirement already satisfied: blinker>=1.6.2 in c:\python312\lib\site-packages (from Flask==3.0.3) (1.8.2)
Requirement already satisfied: colorama in c:\python312\lib\site-packages (from click>=8.1.3->Flask==3.0.3) (0.4.6)
Requirement already satisfied: MarkupSafe>=2.0 in c:\python312\lib\site-packages (from Jinja2>=3.1.2->Flask==3.0.3) (2.1.5)
```

```
[notice] A new release of pip is available: 24.0 -> 24.2
```

```
[notice] To update, run: python.exe -m pip install --upgrade pip
```

```
C:\internship\SQL_Grading>
```

```
C:\internship\SQL_Grading>pip install pandas==2.2.2
```

```
Requirement already satisfied: pandas==2.2.2 in c:\users\22001326\appdata\roaming\python\python312\site-packages (2.2.2)
Requirement already satisfied: numpy>=1.26.0 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2) (1.26.4)
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2) (2024.1)
Requirement already satisfied: six>=1.5 in c:\python312\lib\site-packages (from python-dateutil>=2.8.2->pandas==2.2.2) (1.16.0)
```

Now the requirements are installed (note in the image the requirements were already preinstalled, so it would look different on your end)

```
Microsoft Windows [Version 10.0.22631.4037]
(c) Microsoft Corporation. All rights reserved.
```

```
C:\internship\SQL_Grading>pip install -r requirements.txt
```

```
Requirement already satisfied: Flask==3.0.3 in c:\python312\lib\site-packages (from -r requirements.txt (line 1)) (3.0.3)
Requirement already satisfied: pandas==2.2.2 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from -r requirements.txt (line 2)) (2.2.2)
Requirement already satisfied: Requests==2.32.3 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from -r requirements.txt (line 3)) (2.32.3)
Requirement already satisfied: Werkzeug>=3.0.0 in c:\python312\lib\site-packages (from Flask==3.0.3->-r requirements.txt (line 1)) (3.0.3)
Requirement already satisfied: Jinja2>=3.1.2 in c:\python312\lib\site-packages (from Flask==3.0.3->-r requirements.txt (line 1)) (3.1.4)
Requirement already satisfied: itsdangerous>=2.1.2 in c:\python312\lib\site-packages (from Flask==3.0.3->-r requirements.txt (line 1)) (2.2.0)
Requirement already satisfied: click>=8.1.3 in c:\python312\lib\site-packages (from Flask==3.0.3->-r requirements.txt (line 1)) (8.1.7)
Requirement already satisfied: blinker>=1.6.2 in c:\python312\lib\site-packages (from Flask==3.0.3->-r requirements.txt (line 1)) (1.8.2)
Requirement already satisfied: numpy>=1.26.0 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2->-r requirements.txt (line 2)) (1.26.4)
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2->-r requirements.txt (line 2)) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2->-r requirements.txt (line 2)) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from pandas==2.2.2->-r requirements.txt (line 2)) (2024.1)
Requirement already satisfied: charset-normalizer<4,>=2 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from Requests==2.32.3->-r requirements.txt (line 3)) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in c:\python312\lib\site-packages (from Requests==2.32.3->-r requirements.txt (line 3)) (3.8)
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\python312\lib\site-packages (from Requests==2.32.3->-r requirements.txt (line 3)) (2.2.1)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\22001326\appdata\roaming\python\python312\site-packages (from Requests==2.32.3->-r requirements.txt (line 3)) (2023.7.22)
Requirement already satisfied: colorama in c:\python312\lib\site-packages (from click>=8.1.3->Flask==3.0.3->-r requirements.txt (line 1)) (0.4.6)
Requirement already satisfied: MarkupSafe>=2.0 in c:\python312\lib\site-packages (from Jinja2>=3.1.2->Flask==3.0.3->-r requirements.txt (line 1)) (2.1.5)
Requirement already satisfied: six>=1.5 in c:\python312\lib\site-packages (from python-dateutil>=2.8.2->pandas==2.2.2->-r requirements.txt (line 2)) (1.16.0)
```

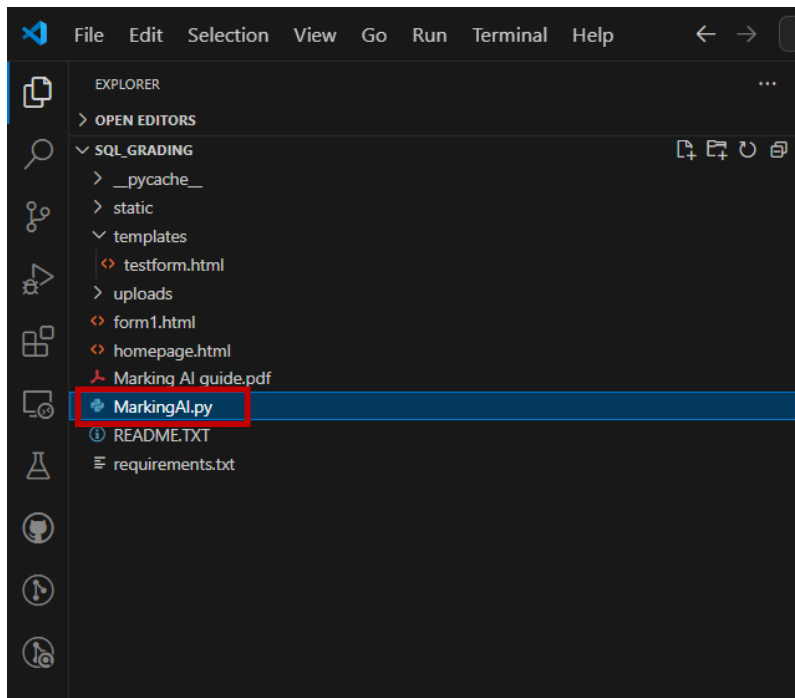
```
[notice] A new release of pip is available: 24.0 -> 24.2
```

```
[notice] To update, run: python.exe -m pip install --upgrade pip
```

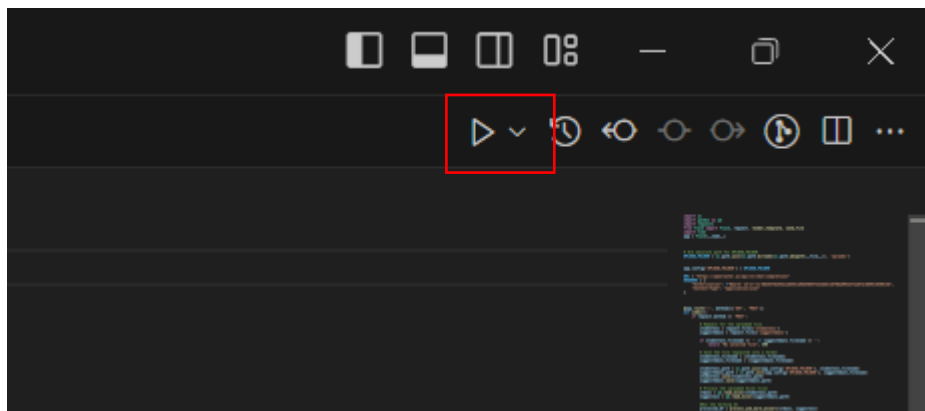
```
C:\internship\SQL_Grading>
```


Running the application

Step 9: Select the “MarkingAI.py”



Press the run icon on the top right of the screen

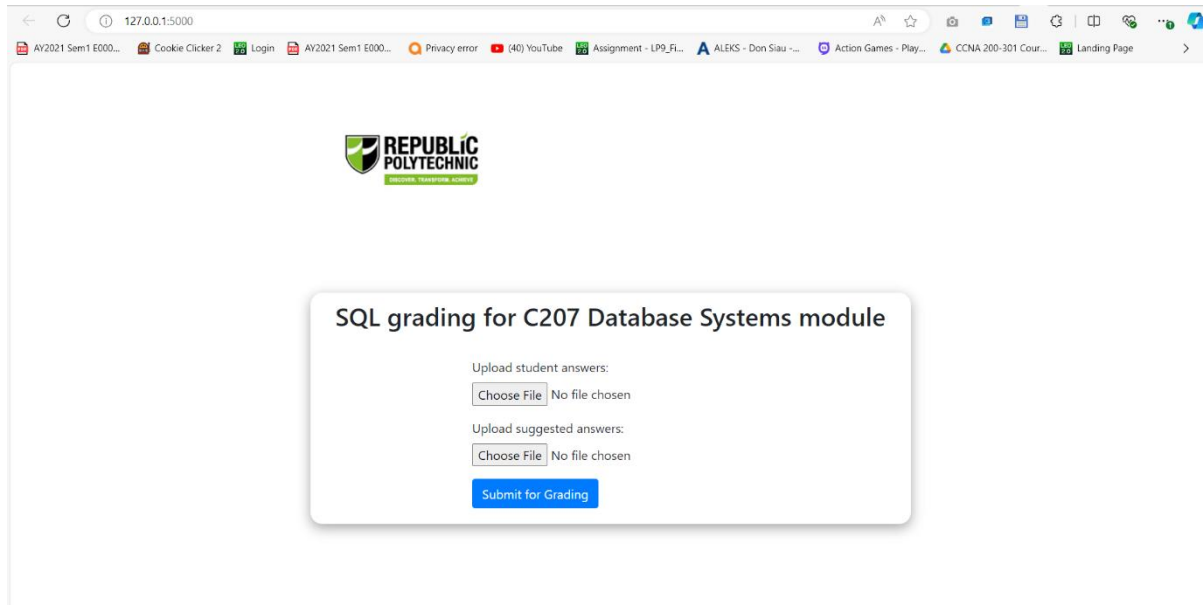


Step 10: On the bottom of the screen in the this should run on the terminal. Hold the ctrl key whilst you click the link highlighted in the red box. (the address of the link might be different on your end, but it should still work)

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS COMMENTS
Microsoft Windows [Version 10.0.22631.4037]
(c) Microsoft Corporation. All rights reserved.

C:\internship\SQL_Grading>C:/Python312/python.exe c:/internship/SQL_Grading/MarkingAI.py
* Serving Flask app 'MarkingAI'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://10.175.21.175:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 122-589-219
```

On your browser the application will appear



Step 11: Find the csv file for each problem statement. It contains the student answers. Find the xlsx file which contains the suggested answers. For each lesson, find the files that correspond with one another. For example:

For lesson 1, find:

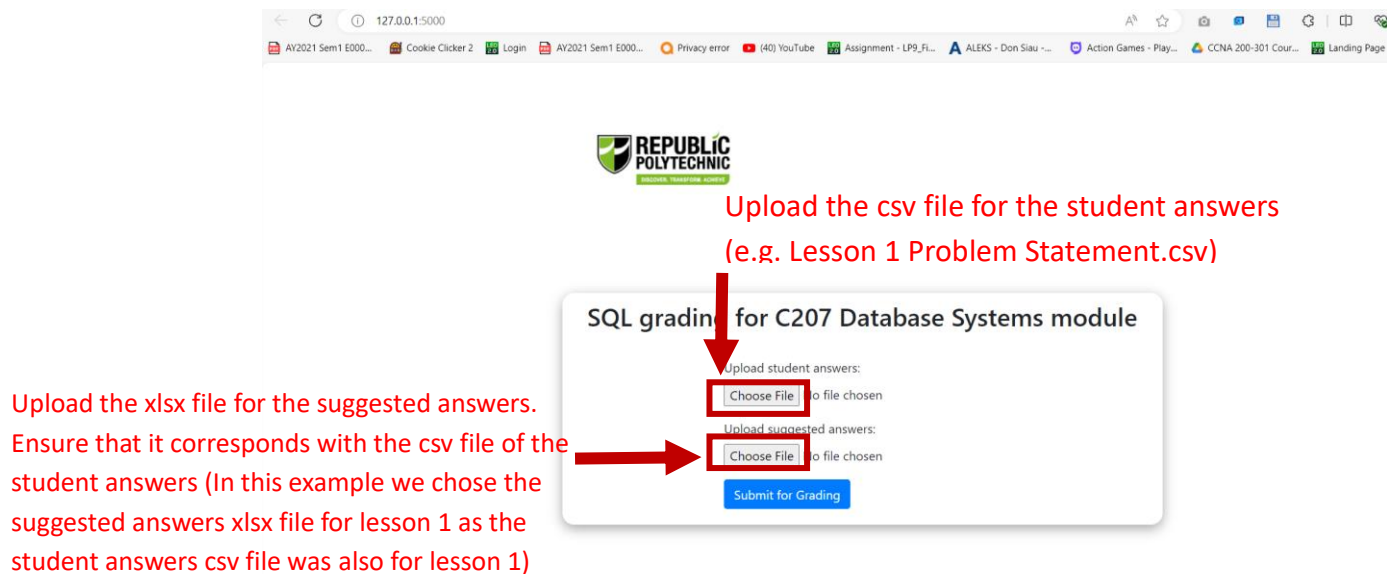
 Lesson 1 problem statement.csv	16/9/2024 11:45 am	Microsoft Excel Co...
 suggestedAnswerL1.xlsx	16/9/2024 11:29 am	Microsoft Excel W...

For lesson 3, find:

 Lesson 3 problem statement.csv	16/9/2024 11:45 am	Microsoft Excel Co...
 suggestedAnswerL3.xlsx	17/9/2024 12:24 pm	Microsoft Excel W...

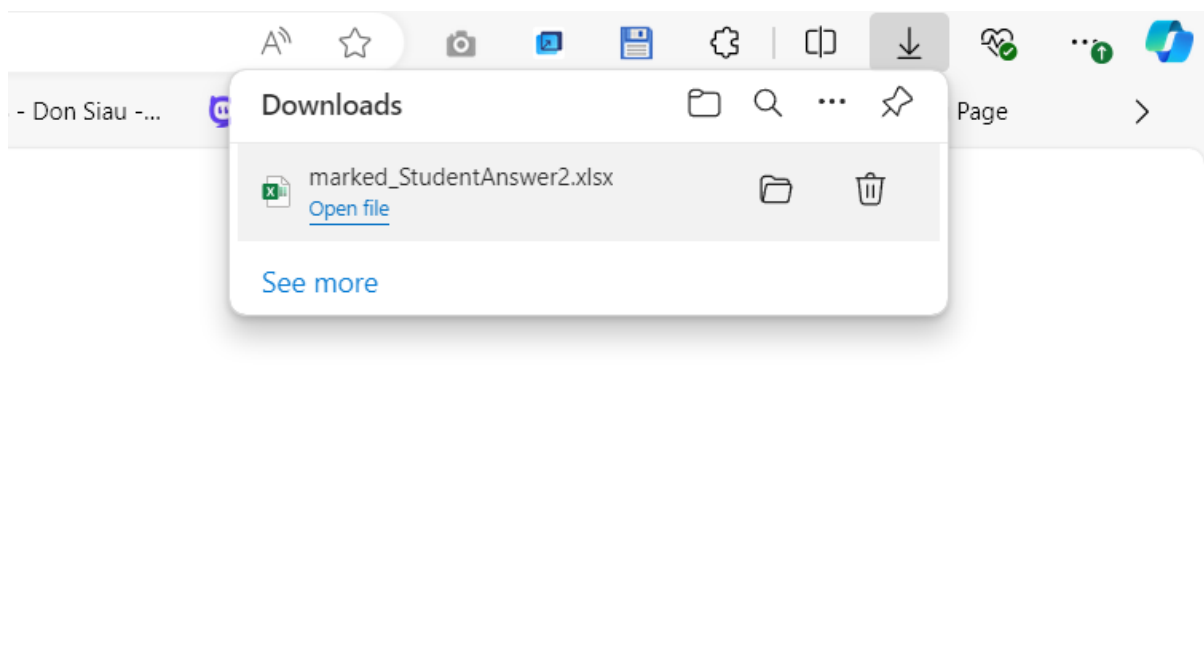
and the same for the other problem statements

Step 12: Now we will submit the quiz results for grading. Click the “Choose File” icons to do so

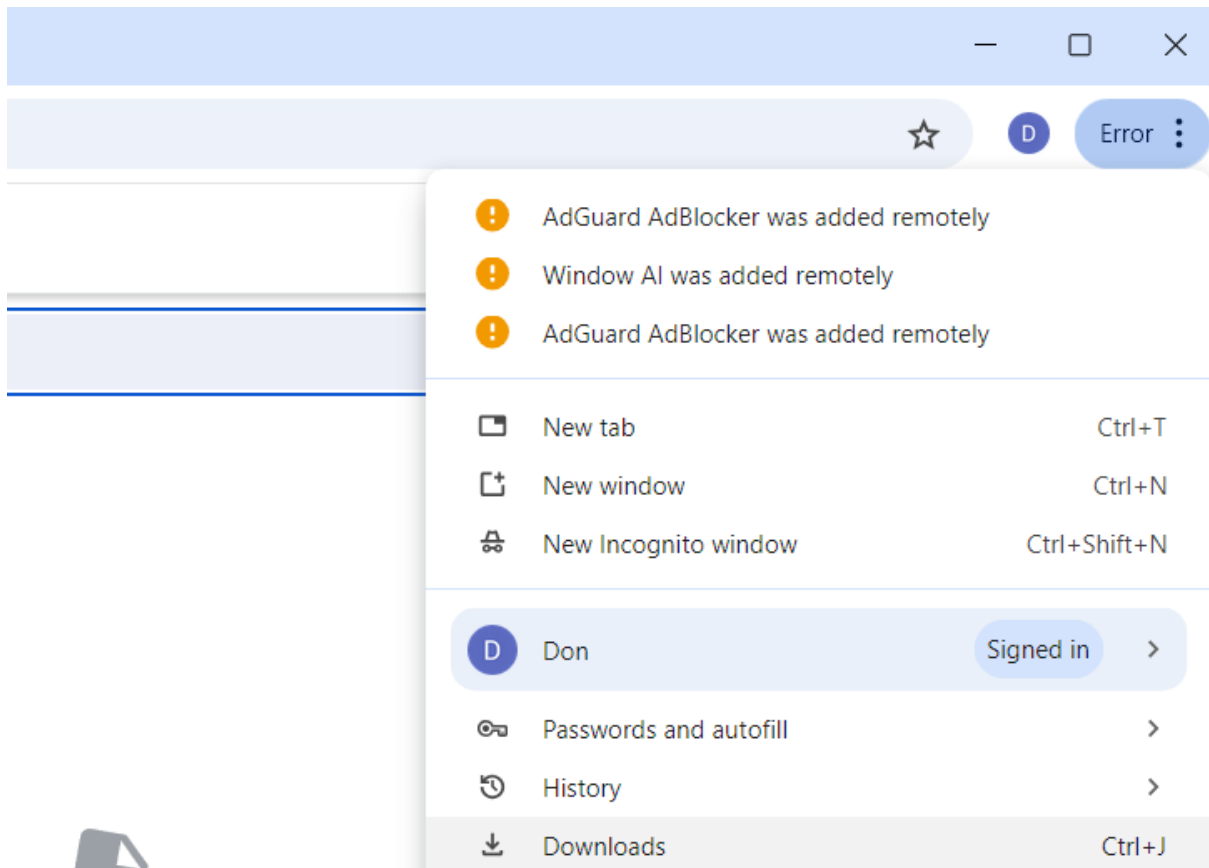


Step 13: Wait for the AI to run and once it is done your browser will download a marked excel version of the student's answers. (May take a while to download).

Edge browser



Chrome browser



Step 14: download it and view it. 2 marks means correct answer 1 mark partially correct 0 marks the answer is blank. The left side is the student Info and their answers, the right side are the marks for each individual question, total marks and percentage

marked_Lesson 1 Problem Statement (6).xlsx													
No Label • Saved to this PC													
File Home Insert Page Layout Formulas Data Review View Automate Help													
Clipboard Font Alignment Number Styles													
A1 Timestamp													
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Timestamp	Class	StudentID	Name	Q1)	Q2)	Q3)	marked->	Q1)_Mark	Q2)_Mark	Q3)_Mark	total_mar	Total Score %
2	2024/09/1	W66C	22001326						0	0	0	0	0.00%
3	2024/09/1	W66E	22001329		SELECT titl	SELECT pu	SELECT isbn,	title, lan	1	1	1	3	50.00%
4	2024/09/1	W66E	22001332		SELECT titl	SELECT pu	SELECT isbn,	title, lan	2	2	2	6	100.00%
5	2024/09/1	W66C	22001291		SELECT titl	SELECT pu	SELECT isbn,	title, lan	2	2	2	6	100.00%

