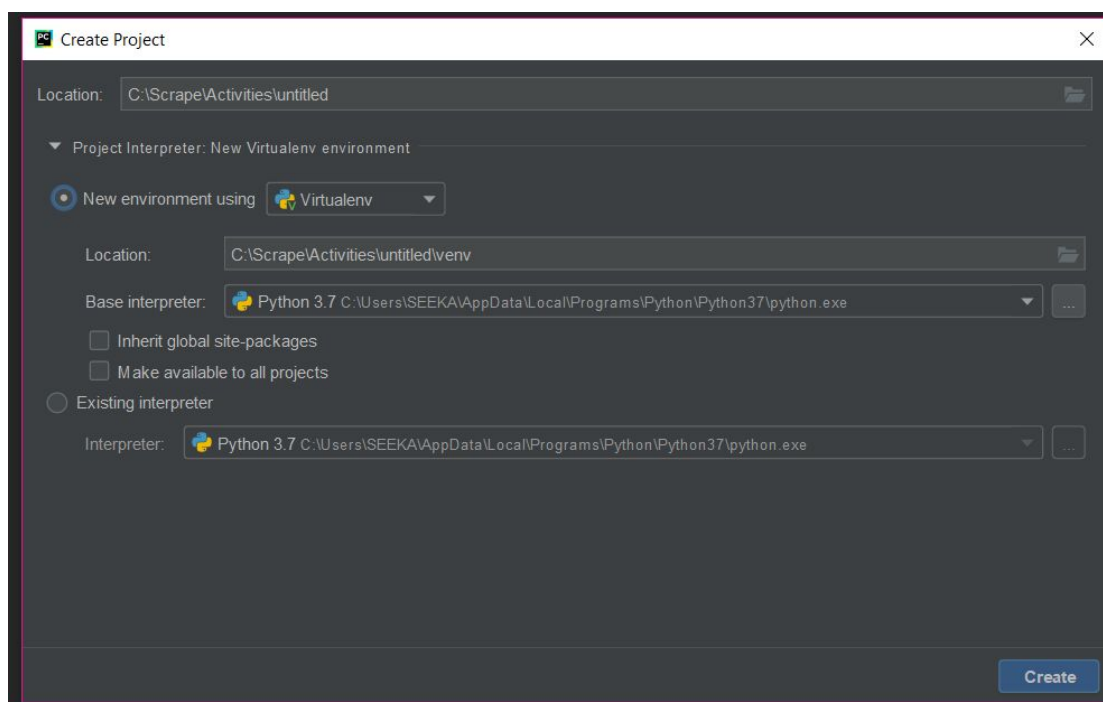
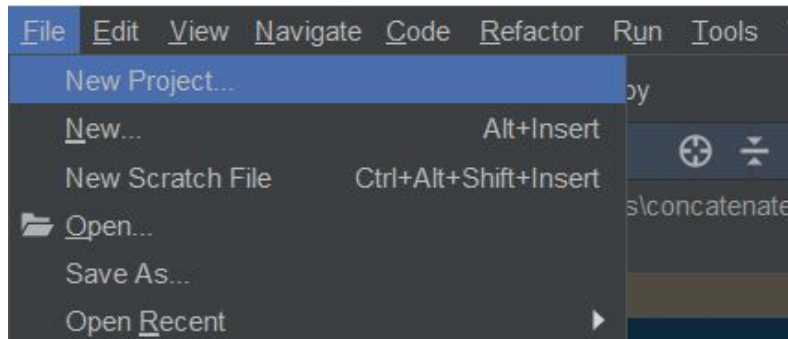
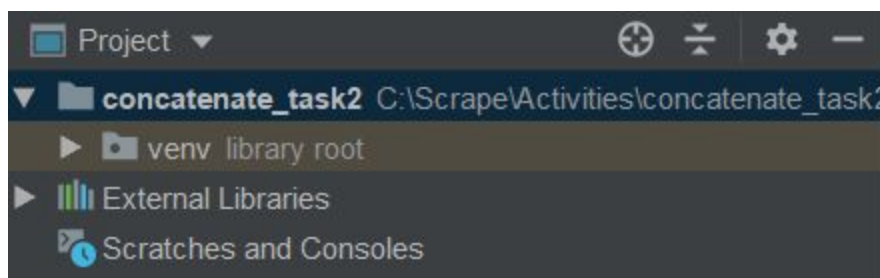


Step 1: Create a new project in PyCharm with the following configuration



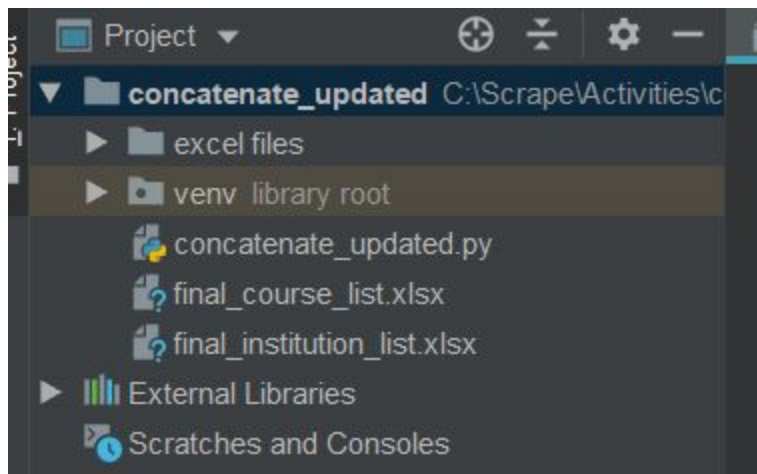
A folder named venv (virtual environment) will be located inside the project folder, else wrong project configuration. Redo step 1



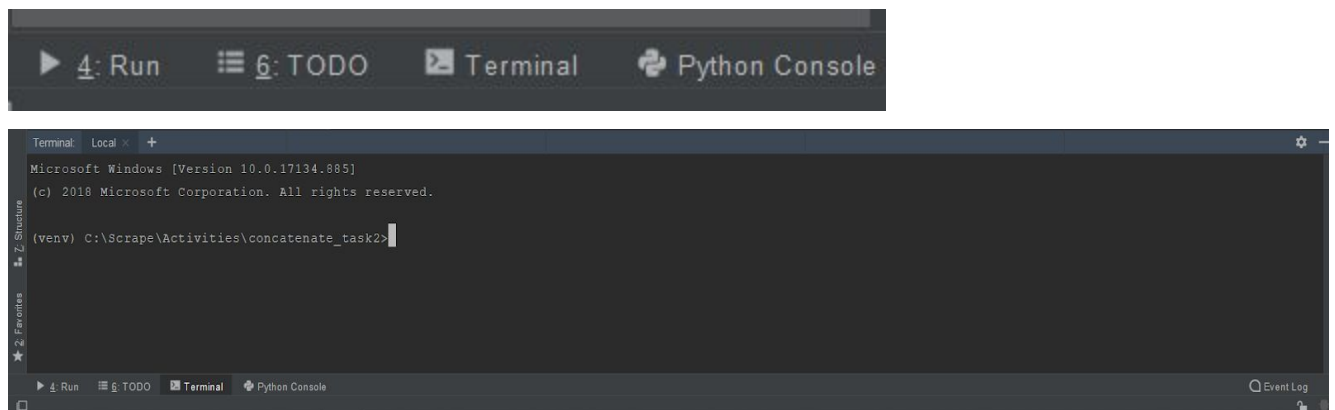
Step 2: Copy these 4 files provided into your project folder

Name	Date modified	Type	Size
excel files	29-Jul-19 8:45 AM	File folder	
concatenate_updated.py	29-Jul-19 8:40 AM	PY File	7 KB
final_course_list.xlsx	29-Jul-19 8:45 AM	Microsoft Excel W...	27 KB
final_institution_list.xlsx	29-Jul-19 8:45 AM	Microsoft Excel W...	11 KB

Your folder should look like this, else redo step 2



Step 3: Click on terminal, located at the bottom left of the screen
























Step 4: type the following into the terminal

- Pip install pandas
- Pip install xlrd
- Pip install openpyxl
- Pip install xlswriter

```
(venv) C:\Scrape\Activities\concatenate_task2>pip install pandas
```

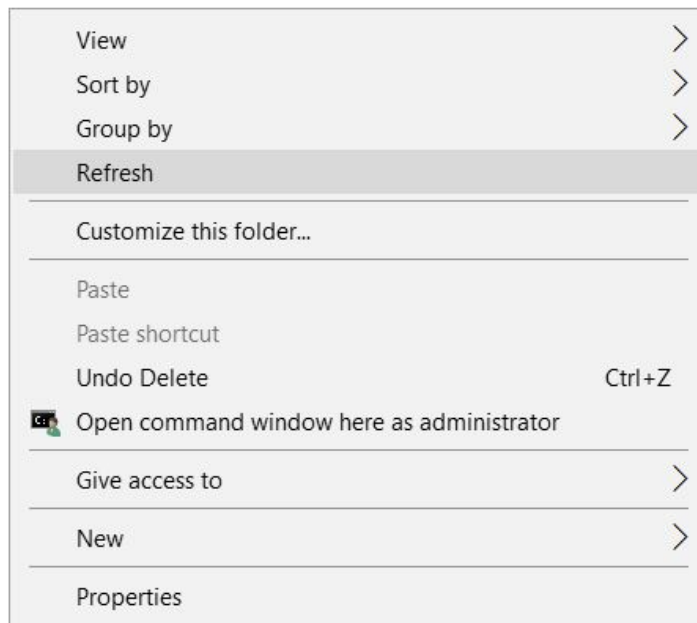
This might take awhile, depending on the speed of your device

Step 5: Add files that you intend to concatenate into the empty “excel files” folder. Eg.

Local Disk (C:) > Scrape > Activities > concatenate_task2 > excel files				
Name	Date modified	Type	Size	
 001. Ahliyyah School for Girls.xlsm	16-Jul-19 3:35 PM	Microsoft Excel M...	33 KB	
 002. Bishop's School for Boys.xlsm	16-Jul-19 3:48 PM	Microsoft Excel M...	34 KB	
 003. Oxford School.xlsm	15-Jul-19 1:29 PM	Microsoft Excel M...	33 KB	
 004. The International Academy - Amma...	15-Jul-19 1:32 PM	Microsoft Excel M...	33 KB	
 005. Islamic Educational College - Jabal ...	15-Jul-19 1:55 PM	Microsoft Excel M...	33 KB	
 006. Islamic Educational College - Al Jub...	15-Jul-19 2:11 PM	Microsoft Excel M...	32 KB	
 007. Mashrek International School.xlsm	16-Jul-19 4:30 PM	Microsoft Excel M...	36 KB	
 008. Sands National Academy.xlsm	15-Jul-19 2:42 PM	Microsoft Excel M...	33 KB	
 009. The International School of Choueifa...	15-Jul-19 2:56 PM	Microsoft Excel M...	32 KB	
 010. Abdul Hamid Sharaf School.xlsm	15-Jul-19 3:10 PM	Microsoft Excel M...	32 KB	
 011. Al-Asriyya School (1).xlsm	15-Jul-19 3:32 PM	Microsoft Excel M...	39 KB	
 012. Alliance Academy Jordan.xlsm	15-Jul-19 3:55 PM	Microsoft Excel M...	32 KB	
 013. American Community School, Amm...	15-Jul-19 4:05 PM	Microsoft Excel M...	38 KB	
 014. Amman Academy Jordan.xlsm	15-Jul-19 4:18 PM	Microsoft Excel M...	34 KB	
 015. Amman Bacculaureate School.xlsm	15-Jul-19 4:29 PM	Microsoft Excel M...	34 KB	
 016. Amman Baptist School.xlsm	15-Jul-19 4:43 PM	Microsoft Excel M...	32 KB	
 017. Amman National School.xlsm	17-Jul-19 8:10 AM	Microsoft Excel M...	32 KB	
 019. Bunat Al Ghad Academy.xlsm	17-Jul-19 8:15 AM	Microsoft Excel M...	30 KB	
 020. Cambridge High School.xlsm	17-Jul-19 8:23 AM	Microsoft Excel M...	31 KB	
 021. De La Salle College.xlsm	17-Jul-19 8:29 AM	Microsoft Excel M...	40 KB	
 022. Lycée Français d'Amman.xlsm	17-Jul-19 8:33 AM	Microsoft Excel M...	33 KB	

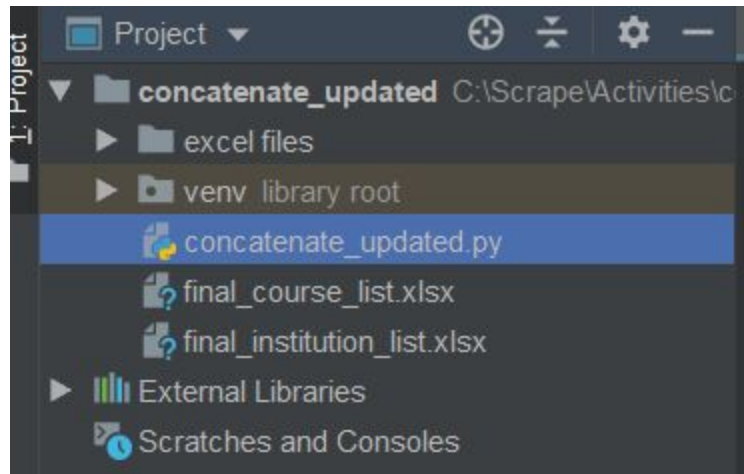
Step 6: Once the files are added into the folder, refresh the project folder

Name	Date modified	Type	Size
.idea	29-Jul-19 8:47 AM	File folder	
excel files	29-Jul-19 8:33 AM	File folder	
venv	26-Jul-19 2:16 PM	File folder	
concatenate_updated.py	29-Jul-19 8:40 AM	PY File	7 KB
final_course_list.xlsx	29-Jul-19 8:40 AM	Microsoft Excel W...	324 KB
final_institution_list.xlsx	29-Jul-19 8:40 AM	Microsoft Excel W...	94 KB

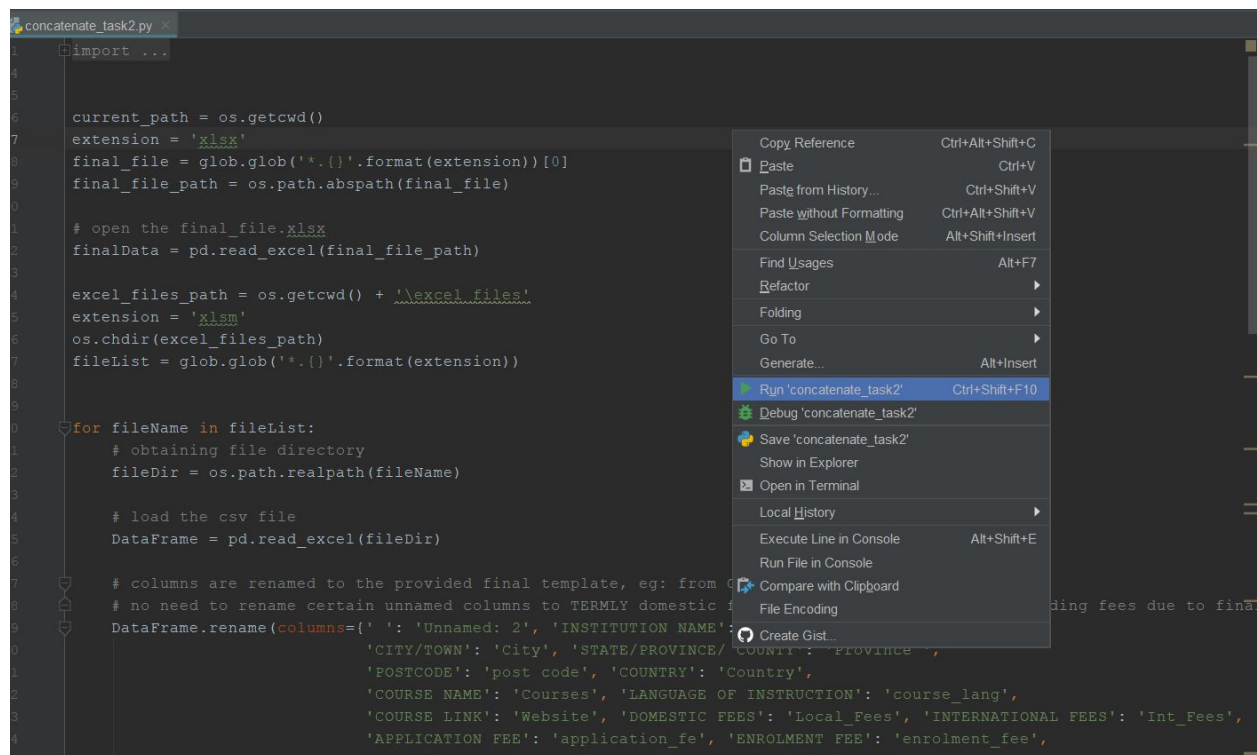


This is done by a right click and selecting the “Refresh” option, alternatively you can click on the circle/arrow icon on the top right

Step 7: Return to PyCharm and click on the python file “ concatenate_updated.py”



Step 8: Hover mouse to the code and right click, followed by selecting the “run concatenate_updated.py” option



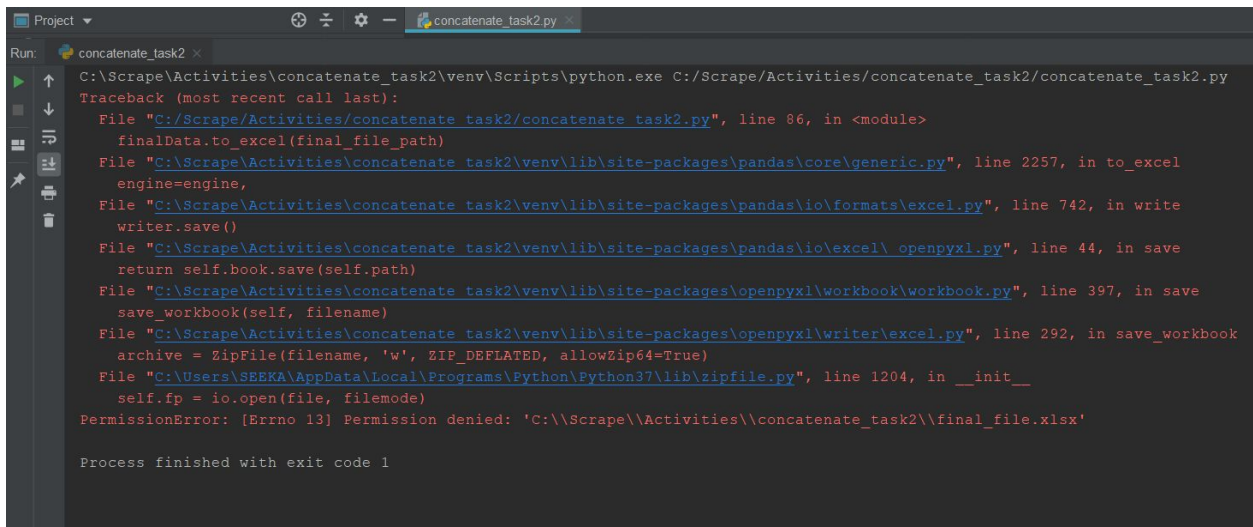
Larger number of files in the “excel files” folder, more time is need to concatenate
Generally, 8-15 seconds for 50+ input files

To view the data, click on 'final_institution_list' or 'final_course_list' file to view the concatenated excel files

The existing data in final files will not be deleted, if its corresponding input file is deleted in the "excel files" folder.

Therefore, you can/should delete them for lower compile time

Common errors:



```
Run: concatenate_task2 x
C:\Scrape\Activities\concatenate_task2\venv\Scripts\python.exe C:/Scrape/Activities/concatenate_task2/concatenate_task2.py
Traceback (most recent call last):
  File "C:/Scrape/Activities/concatenate_task2/concatenate_task2.py", line 86, in <module>
    finalData.to_excel(final_file_path)
  File "C:\Scrape\Activities\concatenate_task2\venv\lib\site-packages\pandas\core\generic.py", line 2257, in to_excel
    engine=engine,
  File "C:\Scrape\Activities\concatenate_task2\venv\lib\site-packages\pandas\io\formats\excel.py", line 742, in write
    writer.save()
  File "C:\Scrape\Activities\concatenate_task2\venv\lib\site-packages\pandas\io\excel\openpyxl.py", line 44, in save
    return self.book.save(self.path)
  File "C:\Scrape\Activities\concatenate_task2\venv\lib\site-packages\openpyxl\workbook\workbook.py", line 397, in save
    save_workbook(self, filename)
  File "C:\Scrape\Activities\concatenate_task2\venv\lib\site-packages\openpyxl\writer\excel.py", line 292, in save_workbook
    archive = ZipFile(filename, 'w', ZIP_DEFLATED, allowZip64=True)
  File "C:\Users\SEEKA\AppData\Local\Programs\Python\Python37\lib\zipfile.py", line 1204, in __init__
    self.fp = io.open(file, filemode)
PermissionError: [Errno 13] Permission denied: 'C:\\Scrape\\Activities\\concatenate_task2\\final_file.xlsx'

Process finished with exit code 1
```

This results when the script is trying to write into "final_file.xlsx" and the "final_file.xlsx" is being opened in Microsoft Excel

Solution: Close the "final_file.xlsx" in Microsoft Excel

This is the only error so far

No editing of code is needed