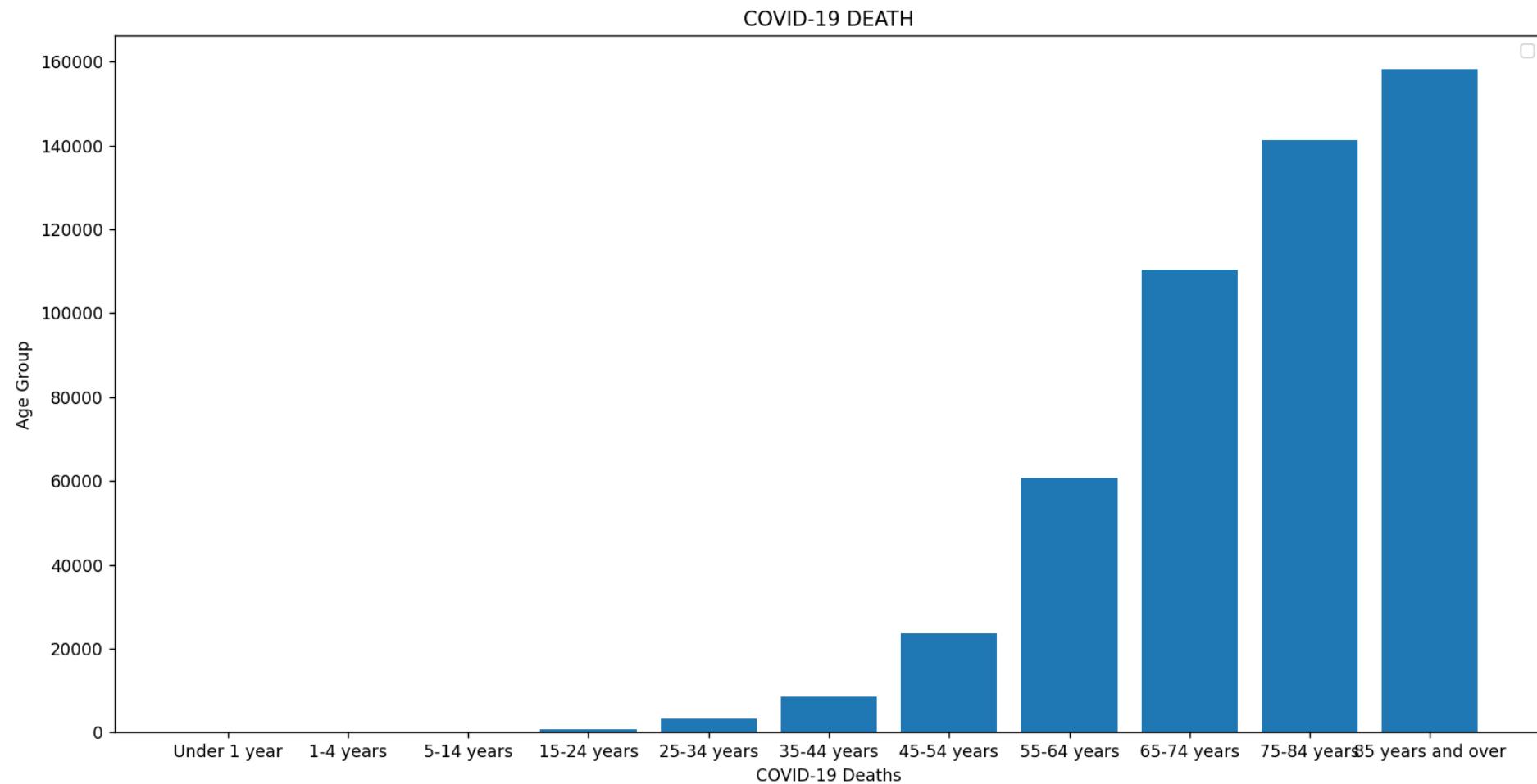


A screenshot of a dark-themed Python development environment in Visual Studio Code (VS Code). The interface includes:

- Top Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Search Bar:** Search term "IIB".
- Left Sidebar:** Explorer, Open Editors, IIB folder containing various files like covid_19_clean_comp..., 1.pdf, d2.csv, etc., and a list of output files (output_1.csv, output_2.csv, output_3.csv, output_4.csv).
- Central Area:** Editor tab bar showing Graph1.py (active), Graph2.py, Graph3.py, data3.csv, and d2.csv. The Graph1.py editor contains Python code for creating a bar chart of COVID-19 deaths by age group.
- Bottom Area:** Problems, Output, Terminal, Ports, Debug Console tabs. The Terminal tab shows command-line history and errors related to pandas library imports.
- Right Sidebar:** Taskbar with powershell, Python Deb..., and Code buttons.
- Bottom Status Bar:** Line 18, Col 11, Spaces: 4, UTF-8, CRLF, Python 3.12.1 64-bit.
- Bottom Icons:** Weather (14°C Haze), Windows Start button, Search, Task View, Chat, Instagram, Mail, Microsoft Edge, Google Chrome, Microsoft Store, Microsoft Teams, and Excel.
- Bottom Right:** ENG IN, WiFi, Battery, and Date/Time (19-12-2023) indicators.

```
1 import pandas as pd
2 import matplotlib.pyplot as plt
3
4 df=pd.read_csv('d2.csv')
5
6 deathcovid19=df['Covid']
7 AgeGroup=df['AgeGroup']
8
9 bar_width = 0.35
10
11 plt.figure(figsize=(12, 6))
12 plt.bar(AgeGroup, deathcovid19)
13
14 plt.title('COVID-19 DEATH')
15 plt.xlabel('COVID-19 Deaths')
16 plt.ylabel('Age Group')
17 plt.legend()
18 plt.show()
```

```
File "C:\Users\abhibg\AppData\Roaming\Python\Python312\site-packages\pandas\core\groupby\groupby.py", line 1278, in __init__
    grouper, exclusions, obj = get_grouper(
File "C:\Users\abhibg\AppData\Roaming\Python\Python312\site-packages\pandas\core\groupby\groupby.py", line 1009, in get_grouper
    raise KeyError(gpr)
KeyError: 'AgeGroup'
PS C:\Users\abhibg\Desktop\IIB> c;; cd 'c:\Users\abhibg\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhibg\.vscode\extensions\ms-python.python\python-2023.22.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launched' '52775' '--' 'C:\Users\abhibg\Desktop\IIB\Graph3.py'
PS C:\Users\abhibg\Desktop\IIB> c;; cd 'c:\Users\abhibg\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhibg\.vscode\extensions\ms-python.python\python-2023.22.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launched' '53056' '--' 'C:\Users\abhibg\Desktop\IIB\Graph2.py'
PS C:\Users\abhibg\Desktop\IIB> c;; cd 'c:\Users\abhibg\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhibg\.vscode\extensions\ms-python.python\python-2023.22.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launched' '53070' '--' 'C:\Users\abhibg\Desktop\IIB\Graph2.py'
PS C:\Users\abhibg\Desktop\IIB>
```



The screenshot shows a Jupyter Notebook interface with a dark theme. The top bar includes standard menu items: File, Edit, Selection, View, Go, Run, Terminal, Help, and a search bar labeled 'IIB'. The left sidebar contains icons for various tools like Explorer, Open Editors, IIB, and Timeline. The 'OPEN EDITORS' section lists several files: tablu.py, Graph1.py, Graph2.py (the active file), Graph3.py, data3.csv, and d2.csv. The main workspace displays Python code for generating a bar chart titled 'COVID-19 DEATH' comparing COVID, AllCause, and NonCovid deaths across age groups. The code uses pandas to read CSV data and matplotlib.pyplot for plotting. The bottom status bar shows the current cell is at Line 3, Column 1, with 4 spaces, using UTF-8 encoding, CRLF line endings, and Python 3.12.1 64-bit. A system tray at the bottom indicates it's 14°C Haze, ENG IN, and the date/time is 19-12-2023 21:24.

```
import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv('d2.csv')

deathcovid19=df.groupby('AgeGroup')['Covid'].sum()
allcause=df.groupby('AgeGroup')['AllCause'].sum()
noncovid=df.groupby('AgeGroup')['NonCovid'].sum()

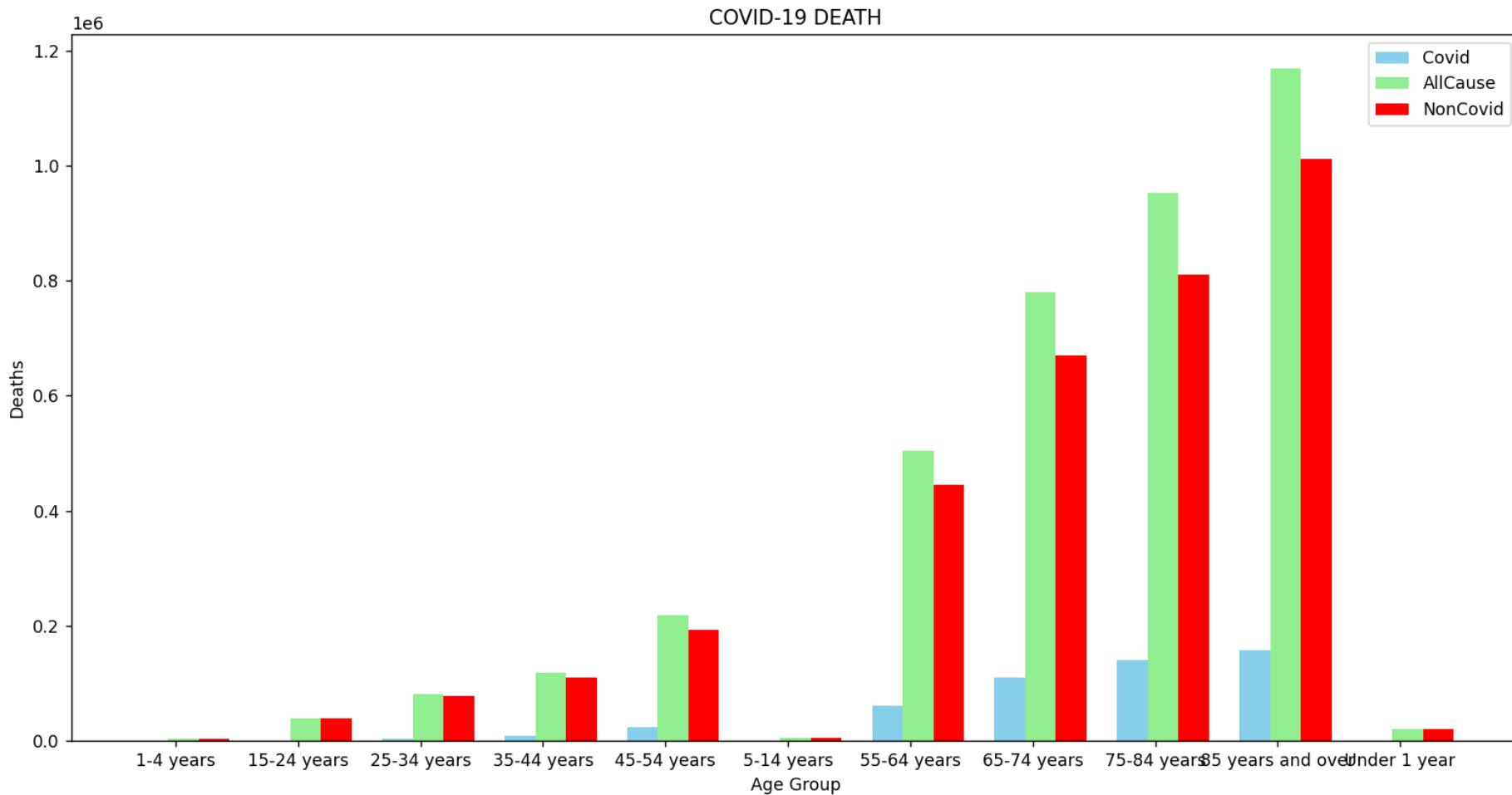
plt.figure(figsize=(12, 6))
bar_width = 0.25
x = range(len(deathcovid19))

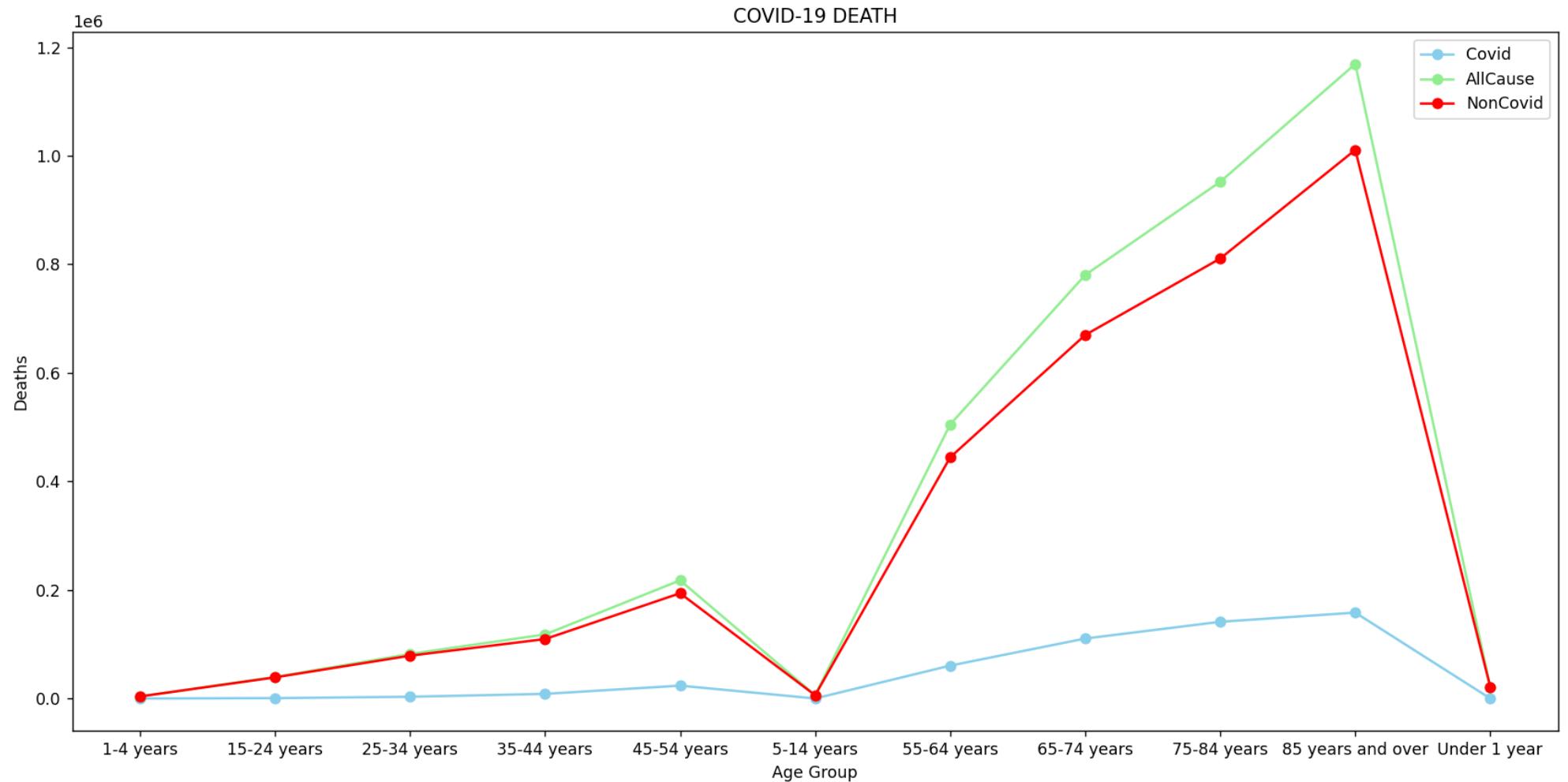
plt.bar(x, deathcovid19, bar_width, color='skyblue', label='Covid')
plt.bar([i + bar_width for i in x], allcause, bar_width, color='lightgreen', label='AllCause')
plt.bar([i + 2*bar_width for i in x], noncovid, bar_width, color='red', label='NonCovid')

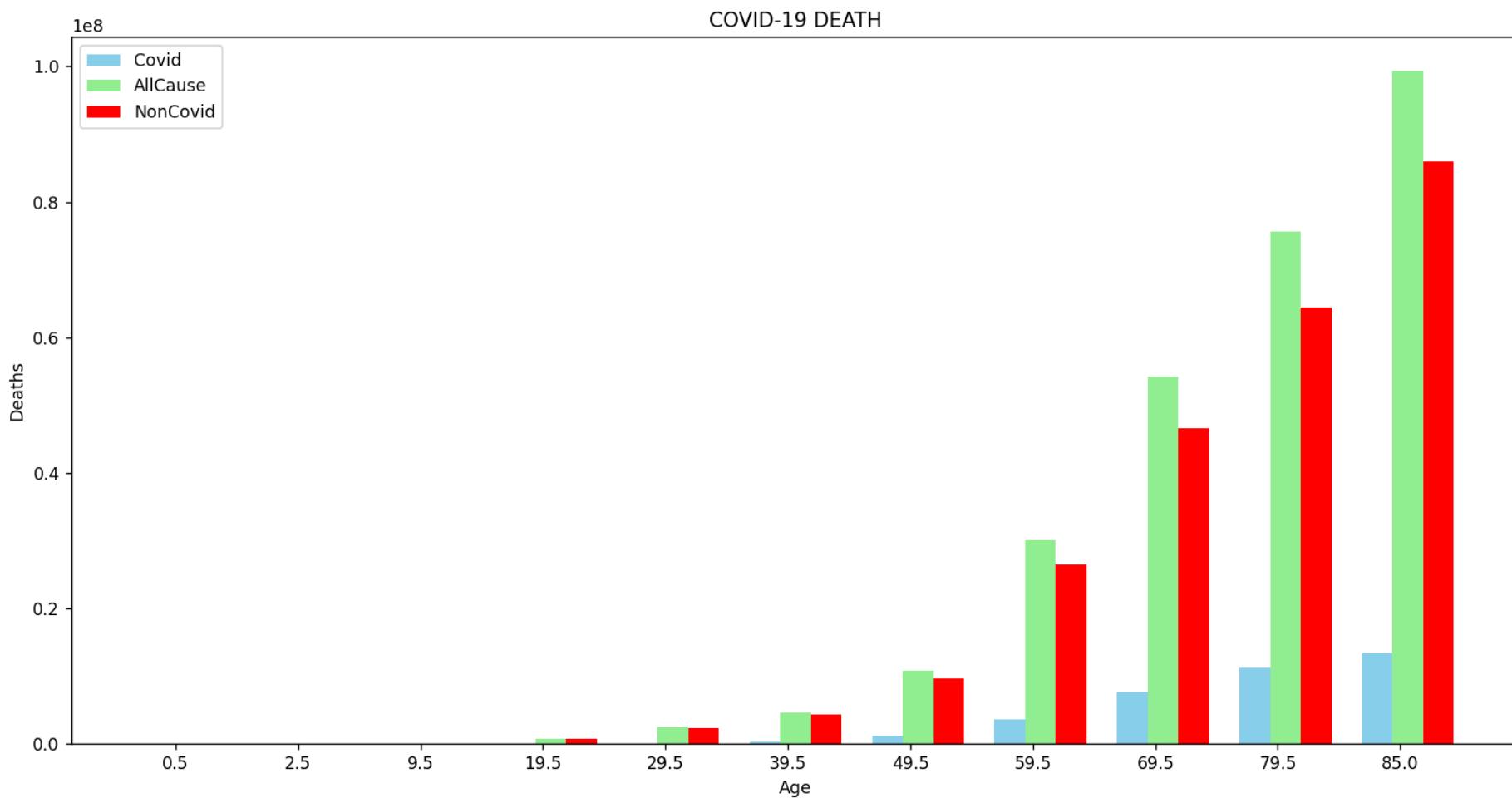
plt.title('COVID-19 DEATH')
plt.xlabel('Age Group')
plt.ylabel('Deaths')
plt.xticks([i + 1.5*bar_width / 2 for i in x], deathcovid19.index)
plt.legend()
plt.show()

plt.plot(x, deathcovid19, marker='o', linestyle='--', color='skyblue', label='Covid')
plt.plot(x, allcause, marker='o', linestyle='--', color='lightgreen', label='AllCause')
plt.plot(x, noncovid, marker='o', linestyle='--', color='red', label='NonCovid')

plt.title('COVID-19 DEATH')
plt.xlabel('Age Group')
plt.ylabel('Deaths')
plt.xticks(x, deathcovid19.index)
plt.legend()
plt.tight_layout()
plt.show()
```







A screenshot of the Visual Studio Code (VS Code) interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, Help, and a system tray with icons for battery, signal, and time (08). The left sidebar contains icons for Explorer, Search, Open Editors (with 1 unsaved file), IIB, and a list of files including tablu.py, Graph1.py, Graph2.py, Graph3.py, data3.csv, d2.csv, covid_19_clean_comp..., 1.pdf, d2.csv, d2.xlsx, data1.csv, data2.csv, data2.xlsx, data3.csv, data3.xlsx, Graph1.ipynb, Graph1.py, Graph2.ipynb, Graph2.py, Graph3.ipynb, Graph3.py, output_1.csv, output_2.csv, output_3.csv, output_4.csv, and tablu.py. The main area shows the code for tablu.py:

```
1  '''import tabula
2  df = tabula.read_pdf("1.pdf", pages='all')
3  df.to_csv('1.csv', index=False)'''
4  import tabula
5
6  # Provide the path to your PDF file
7  file_path = '1.pdf'
8
9  # Extract tables from PDF into a list of Pandas DataFrames
10 tables = tabula.read_pdf(file_path, pages='all', multiple_tables=True)
11
12 # Convert each DataFrame to a CSV file
13 for idx, df in enumerate(tables):
14     df.to_csv(f'output_{idx + 1}.csv', index=False)
15
```

The bottom navigation bar includes PROBLEMS, OUTPUT, TERMINAL, PORTS, and DEBUG CONSOLE. The TERMINAL tab is active, showing PowerShell output:

```
File "C:\Users\abhid\AppData\Roaming\Python\Python312\site-packages\pandas\core\groupby\groupby.py", line 1278, in __init__
    grouper, exclusions, obj = get_grouper(
File "C:\Users\abhid\AppData\Roaming\Python\Python312\site-packages\pandas\core\groupby\groupby.py", line 1009, in get_grouper
    raise KeyError(gpr)
KeyError: 'AgeGroup'
PS C:\Users\abhid\Desktop\IIB> c;; cd 'c:\Users\abhid\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhid\.vscode\extensions\ms-python.pythonon-2023.22.1\pythonFiles\lib\python\debugpy\adapter'...'..\..\debugpy\launched' '52775' '--' 'C:\Users\abhid\Desktop\IIB\Graph3.py'
PS C:\Users\abhid\Desktop\IIB> c;; cd 'c:\Users\abhid\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhid\.vscode\extensions\ms-python.pythonon-2023.22.1\pythonFiles\lib\python\debugpy\adapter'...'..\..\debugpy\launched' '53056' '--' 'C:\Users\abhid\Desktop\IIB\Graph2.py'
PS C:\Users\abhid\Desktop\IIB> c;; cd 'c:\Users\abhid\Desktop\IIB'; & 'C:\Program Files\Python312\python.exe' 'c:\Users\abhid\.vscode\extensions\ms-python.pythonon-2023.22.1\pythonFiles\lib\python\debugpy\adapter'...'..\..\debugpy\launched' '53070' '--' 'C:\Users\abhid\Desktop\IIB\Graph2.py'
PS C:\Users\abhid\Desktop\IIB>
```

The status bar at the bottom shows Ln 14, Col 52, Spaces: 4, UTF-8, CRLF, Python 3.12.1 64-bit, and a system tray with icons for battery, signal, and time (19:22, ENG IN, 19-12-2023).