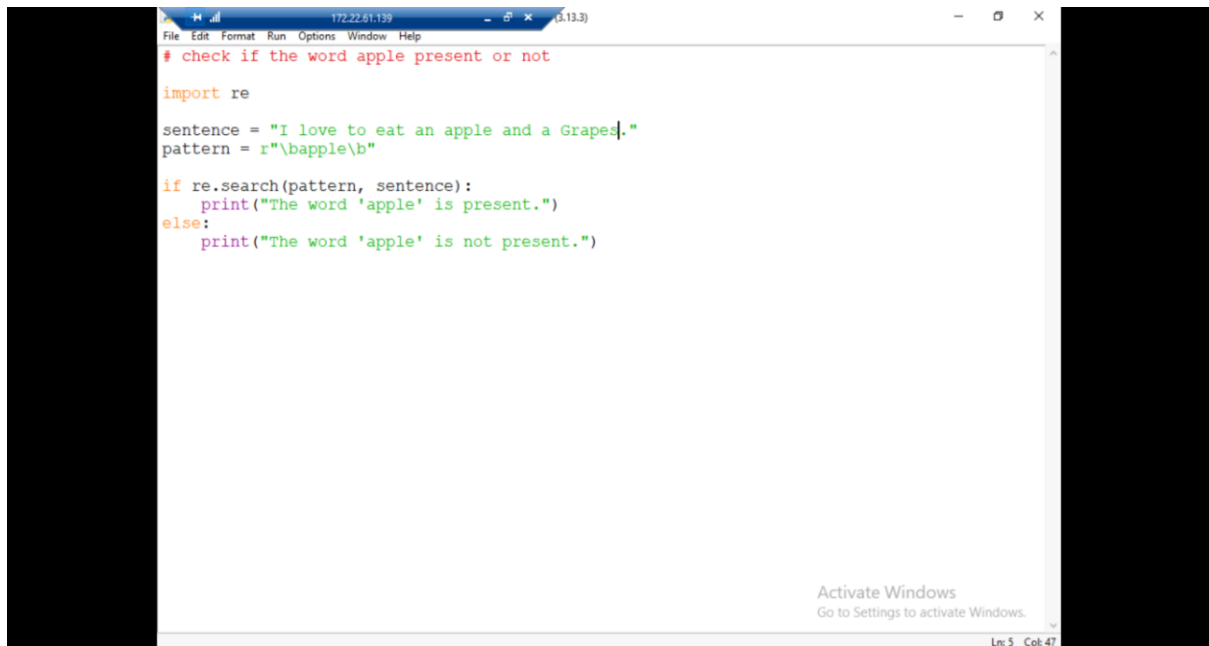


**Q1. (1) Check if word apple present in the sentence or not**



```
# check if the word apple present or not

import re

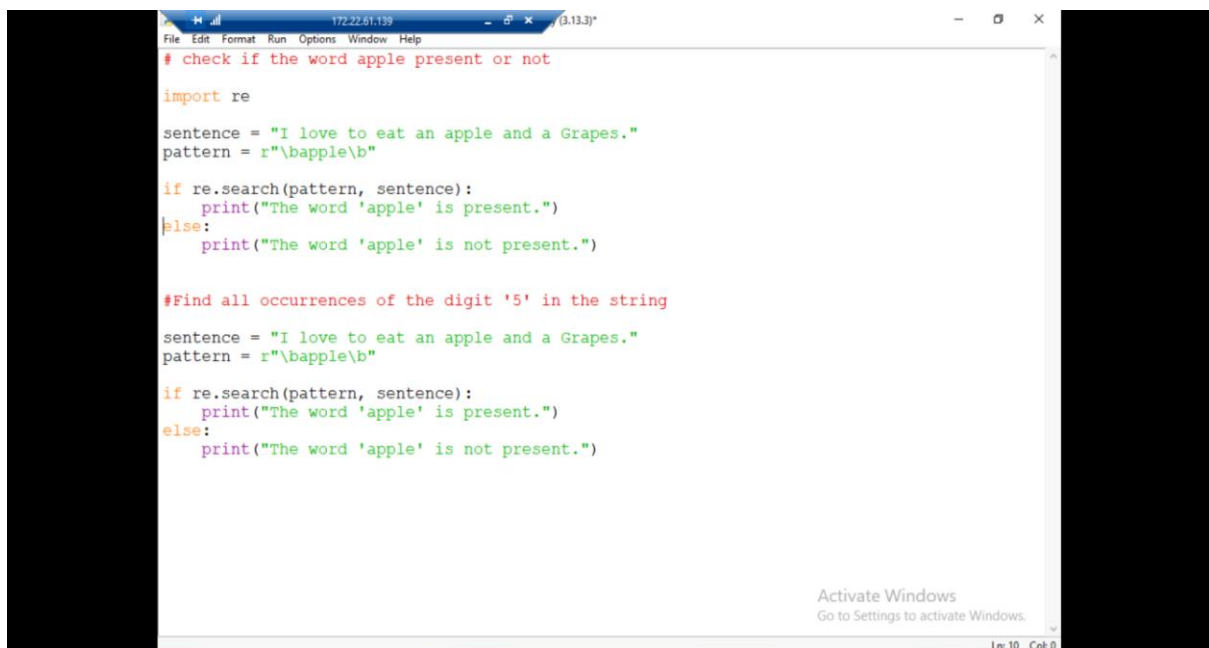
sentence = "I love to eat an apple and a Grapes."
pattern = r"\bapple\b"

if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")
```

Activate Windows  
Go to Settings to activate Windows.

Ln: 5 Col: 47

**Q1. (2) Find all occurrences of the digit '5' in the string "The code is 12345 and the date is 2025-05-10."**



```
# check if the word apple present or not

import re

sentence = "I love to eat an apple and a Grapes."
pattern = r"\bapple\b"

if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")

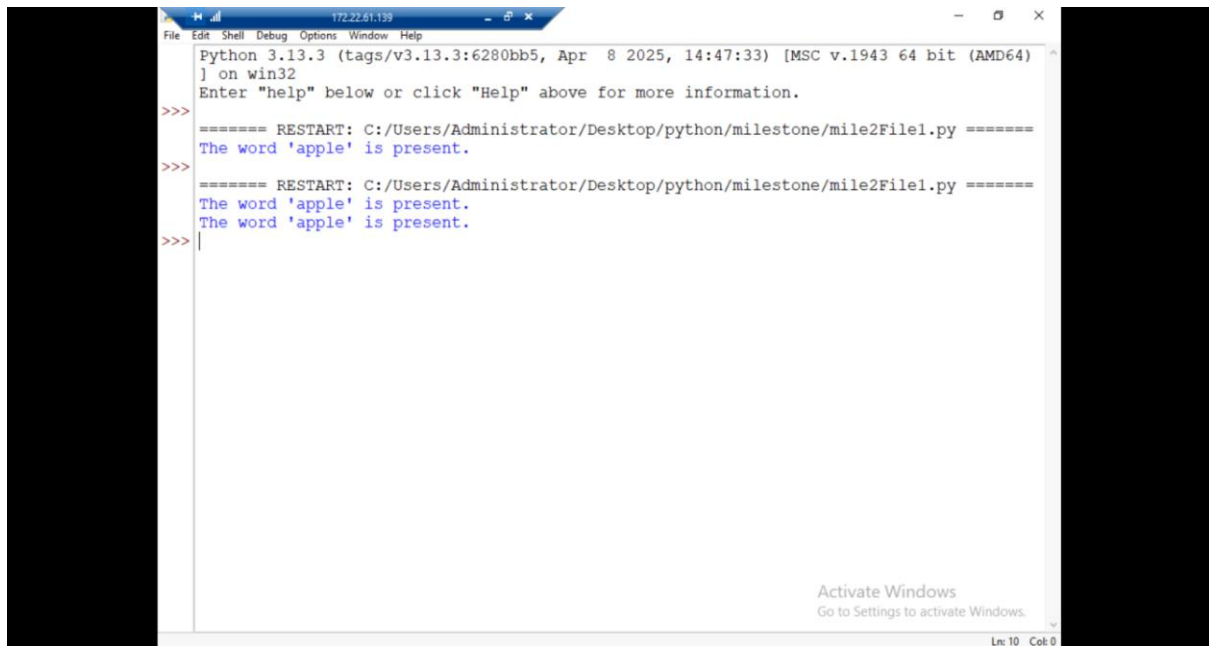
#Find all occurrences of the digit '5' in the string

sentence = "I love to eat an apple and a Grapes."
pattern = r"\bapple\b"

if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")
```

Activate Windows  
Go to Settings to activate Windows.

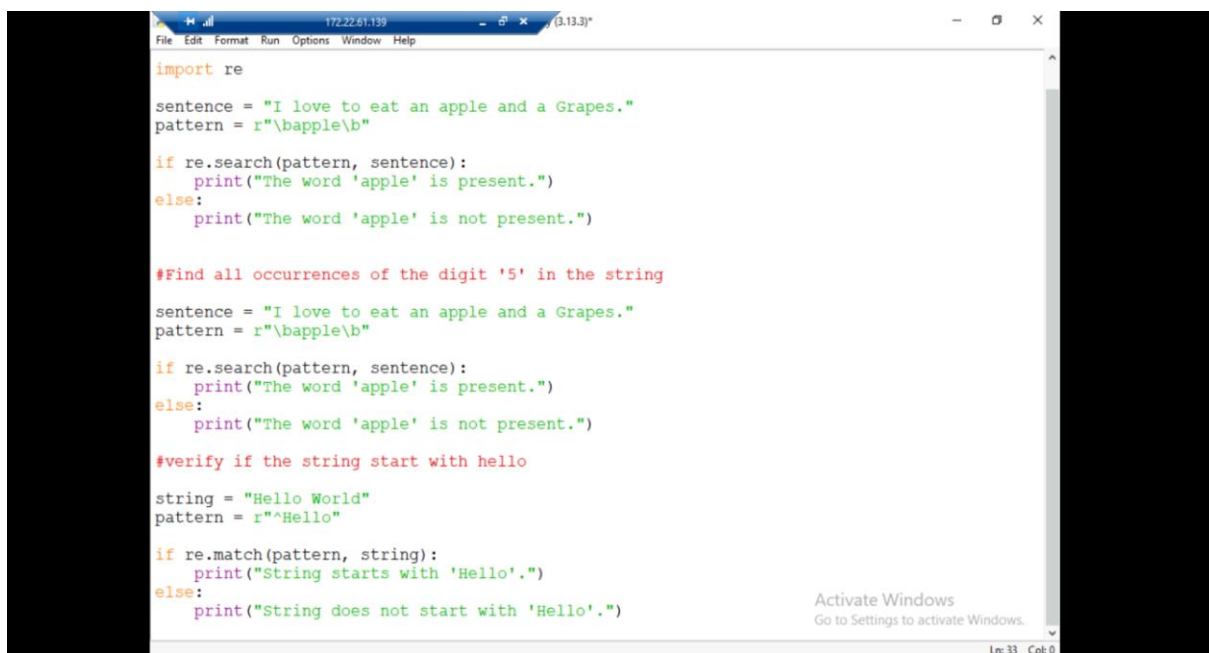
Ln: 10 Col: 0



```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>> ===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File1.py =====
The word 'apple' is present.
>>> ===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File1.py =====
The word 'apple' is present.
The word 'apple' is present.
>>> |
```

**Q1. (3) Verify if a string starts with "Hello".**



```
import re

sentence = "I love to eat an apple and a Grapes."
pattern = r"\bapple\b"

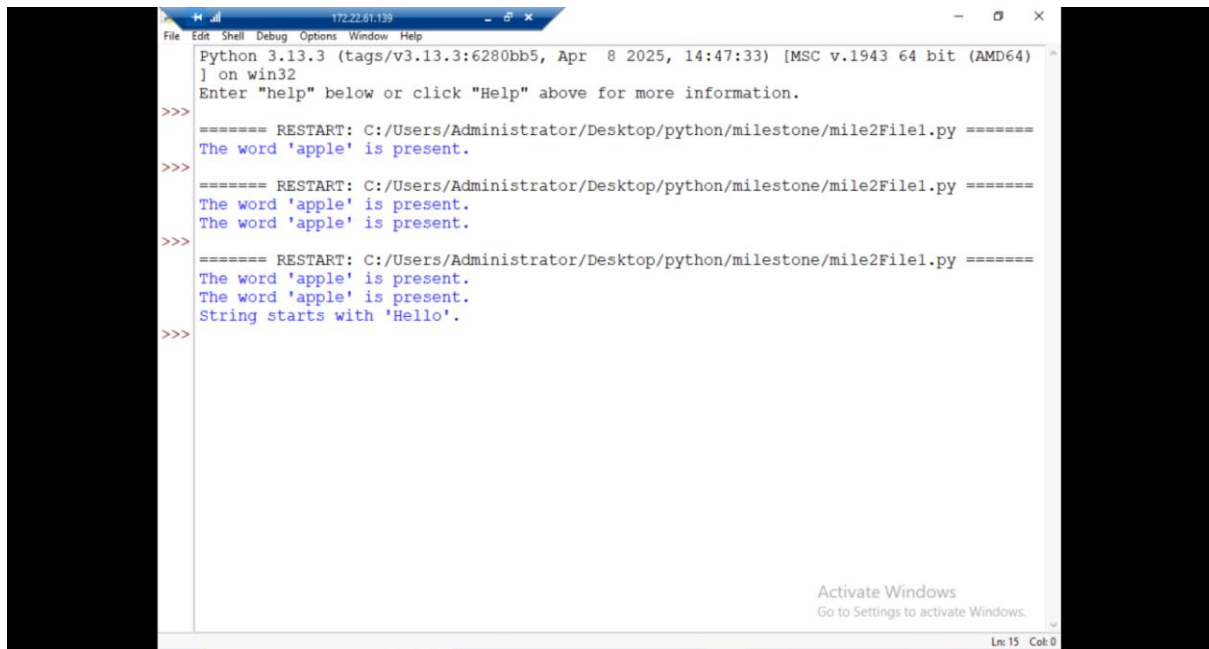
if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")

#Find all occurrences of the digit '5' in the string
sentence = "I love to eat an apple and a Grapes."
pattern = r"\bapple\b"

if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")

#verify if the string start with hello
string = "Hello World"
pattern = r"^Hello"

if re.match(pattern, string):
    print("String starts with 'Hello'.")
else:
    print("String does not start with 'Hello'.")
```



```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

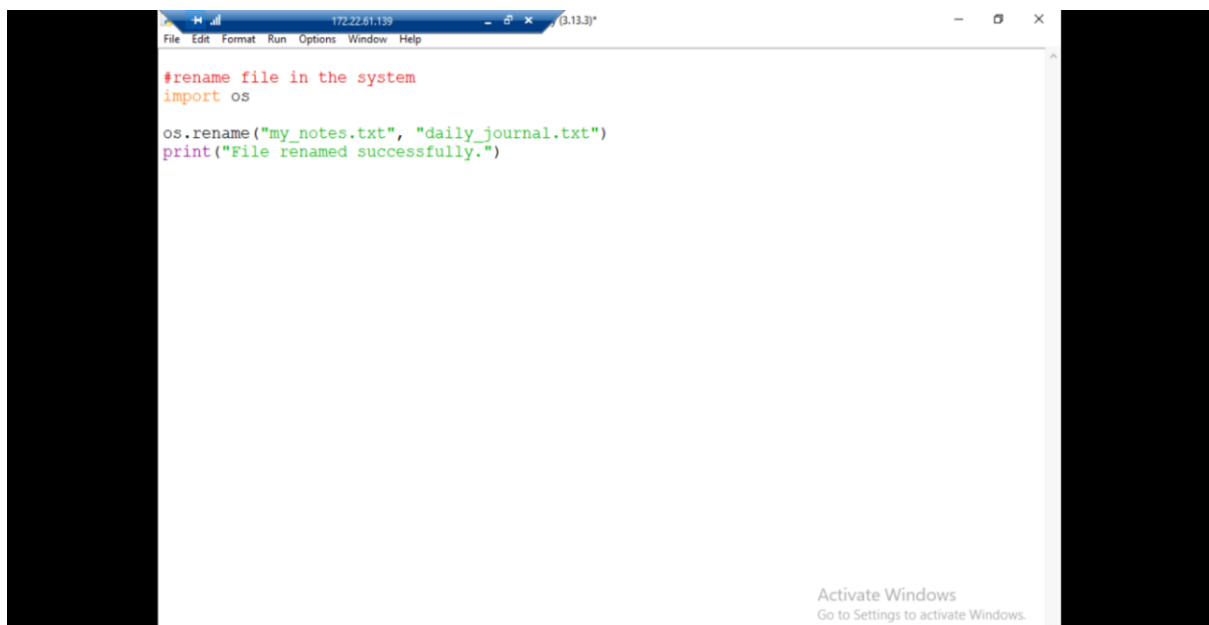
>>> ===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File1.py =====
The word 'apple' is present.

>>> ===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File1.py =====
The word 'apple' is present.
The word 'apple' is present.

>>> ===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File1.py =====
The word 'apple' is present.
The word 'apple' is present.
String starts with 'Hello'.


>>>
```

**Q2. (1) Rename an existing file (e.g., my\_notes.txt to daily\_journal.txt).**



```
#rename file in the system
import os

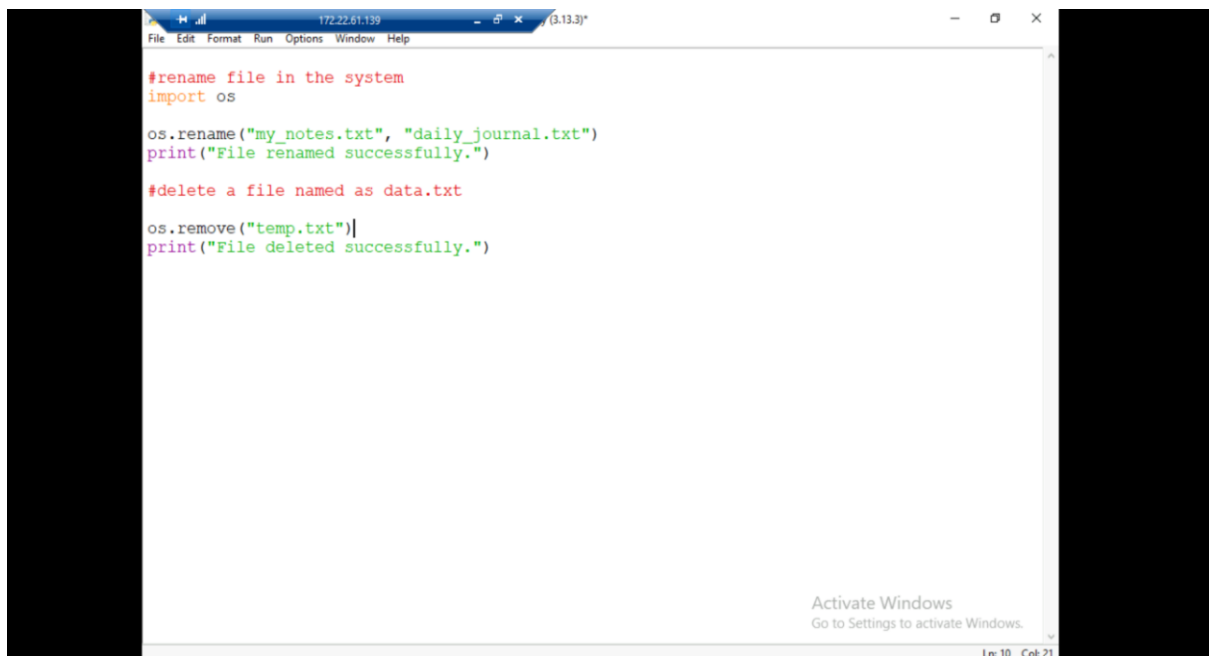
os.rename("my_notes.txt", "daily_journal.txt")
print("File renamed successfully.")
```



A screenshot of a Python 3.13.3 shell window. The window title is "172.22.61.139". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The shell prompt is "Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32". The user has entered "Enter 'help' below or click 'Help' above for more information." and the prompt is ">>>". The output shows a restart message: "==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====" followed by "File renamed successfully." and another prompt ">>>". An "Activate Windows" watermark is visible in the bottom right corner.

```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
File renamed successfully.
>>>
```

## Q2. (2) remove file which has name data.txt



A screenshot of a Python 3.13.3 shell window. The window title is "172.22.61.139". The menu bar includes "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The shell prompt is "Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32". The user has entered the following code: `#rename file in the system`, `import os`, `os.rename("my_notes.txt", "daily_journal.txt")`, `print("File renamed successfully.")`, `#delete a file named as data.txt`, `os.remove("temp.txt")`, and `print("File deleted successfully.")`. The prompt is ">>>". An "Activate Windows" watermark is visible in the bottom right corner.

```
#rename file in the system
import os

os.rename("my_notes.txt", "daily_journal.txt")
print("File renamed successfully.")

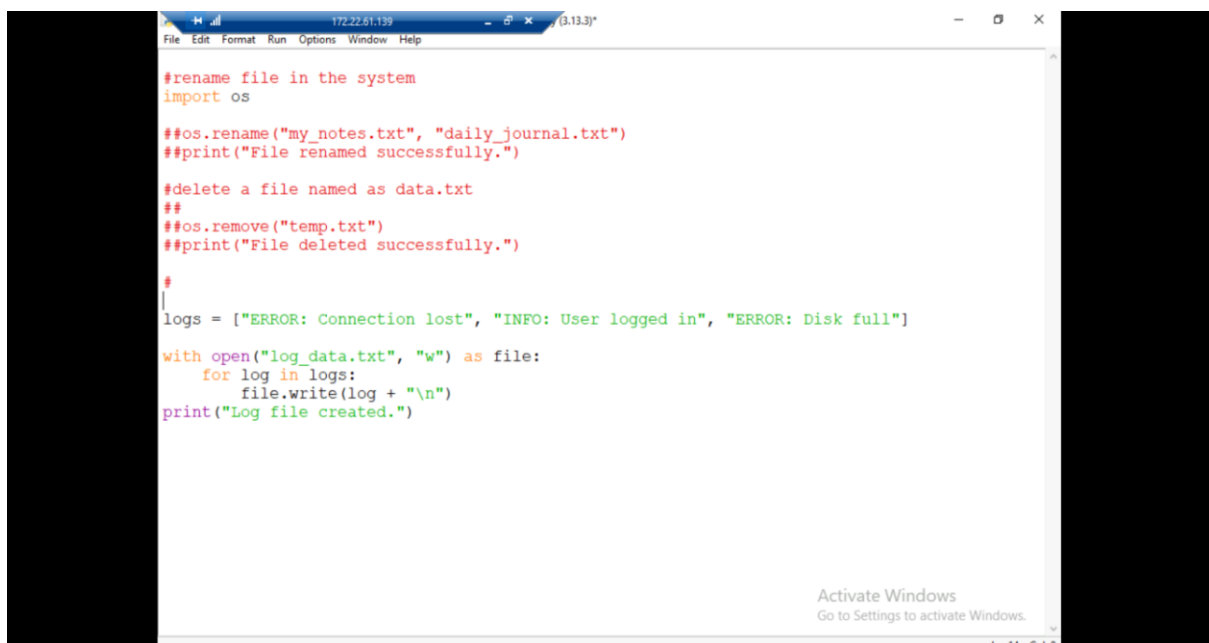
#delete a file named as data.txt
os.remove("temp.txt")
print("File deleted successfully.")
>>>
```



A screenshot of a Python 3.13.3 shell window. The window title is "172.22.61.139". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The shell prompt is "Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32". The user has entered "Enter 'help' below or click 'Help' above for more information." and the prompt is ">>>". The output shows a restart message: "==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====" followed by "File deleted successfully." and another ">>>" prompt. An "Activate Windows" watermark is visible in the bottom right corner.

```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
File deleted successfully.
>>>
```

**Q2.(3) Create a new text file named `log_data.txt` and write multiple lines of randomlog entries (e.g., "ERROR: Connection lost", "INFO: User logged in") into it**



A screenshot of a Python 3.13.3 shell window. The window title is "172.22.61.139". The menu bar includes "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The code being executed is as follows:

```
#rename file in the system
import os

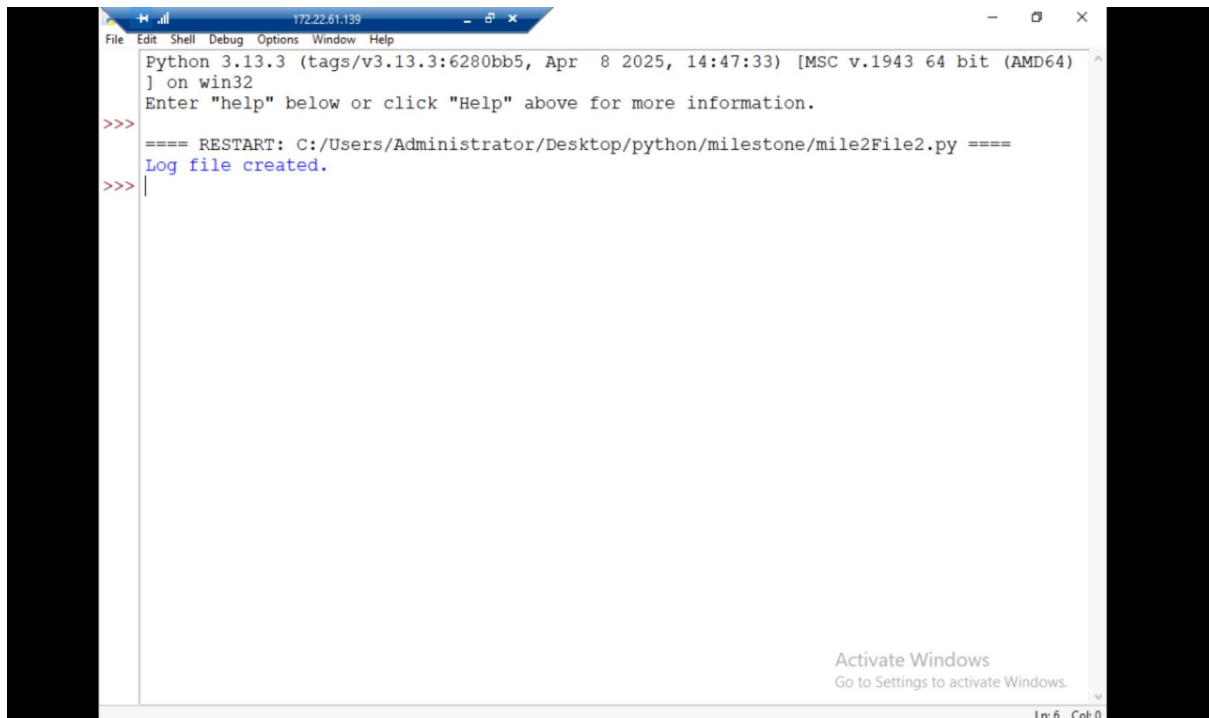
##os.rename("my_notes.txt", "daily_journal.txt")
##print("File renamed successfully.")

#delete a file named as data.txt
##
##os.remove("temp.txt")
##print("File deleted successfully.")

#
|
logs = ["ERROR: Connection lost", "INFO: User logged in", "ERROR: Disk full"]

with open("log_data.txt", "w") as file:
    for log in logs:
        file.write(log + "\n")
print("Log file created.")
```

An "Activate Windows" watermark is visible in the bottom right corner.



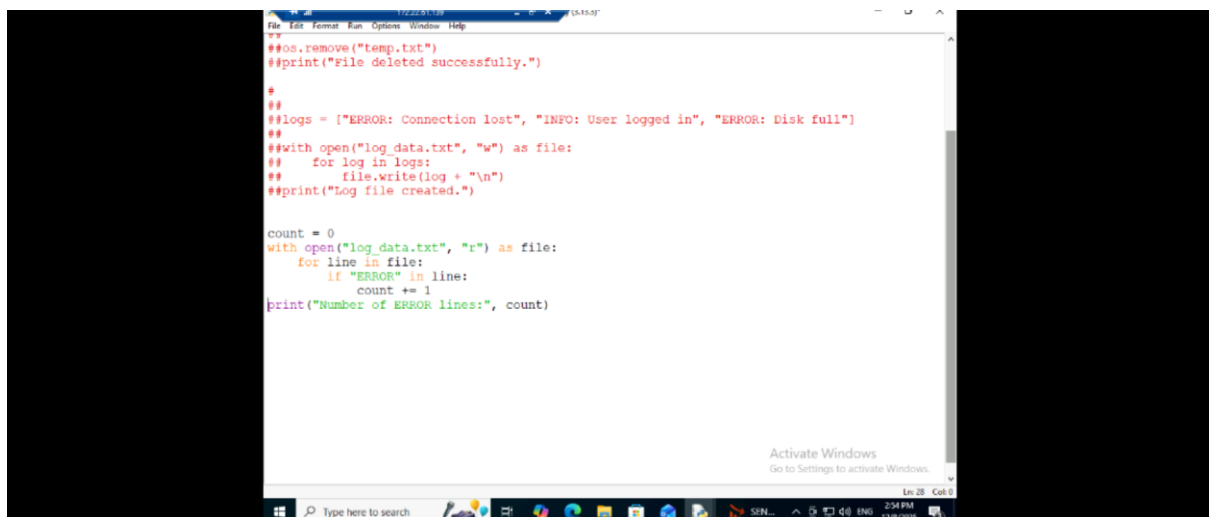
```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
Log file created.
>>>
```

Activate Windows  
Go to Settings to activate Windows.

Ln: 6 Col: 0

**Q2.(4) Count the number of lines in log\_data.txt that contain the word "ERROR".**



```
##os.remove("temp.txt")
##print("file deleted successfully.")

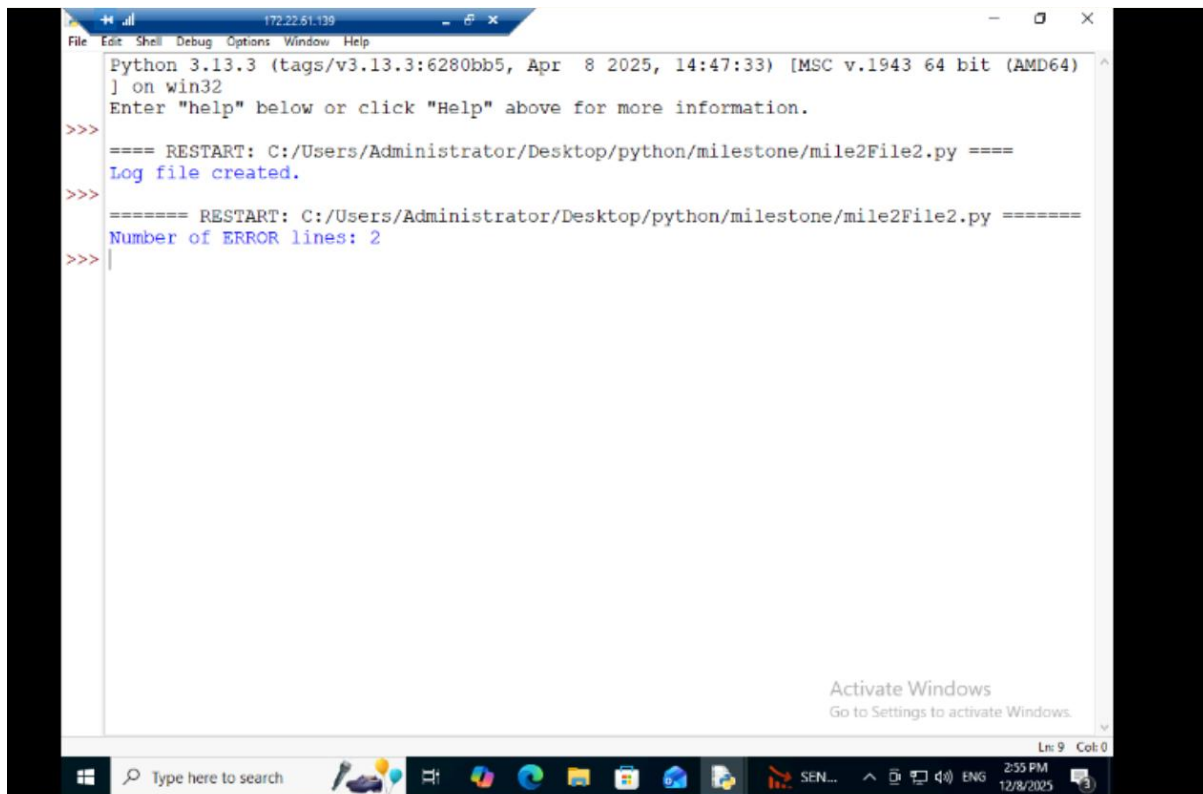
##
##logs = ["ERROR: Connection lost", "INFO: User logged in", "ERROR: Disk full"]
##
##with open("log_data.txt", "w") as file:
##    for log in logs:
##        file.write(log + "\n")
##print("Log file created.")

count = 0
with open("log_data.txt", "r") as file:
    for line in file:
        if "ERROR" in line:
            count += 1
print("Number of ERROR lines:", count)
```

Activate Windows  
Go to Settings to activate Windows.

Ln: 28 Col: 8

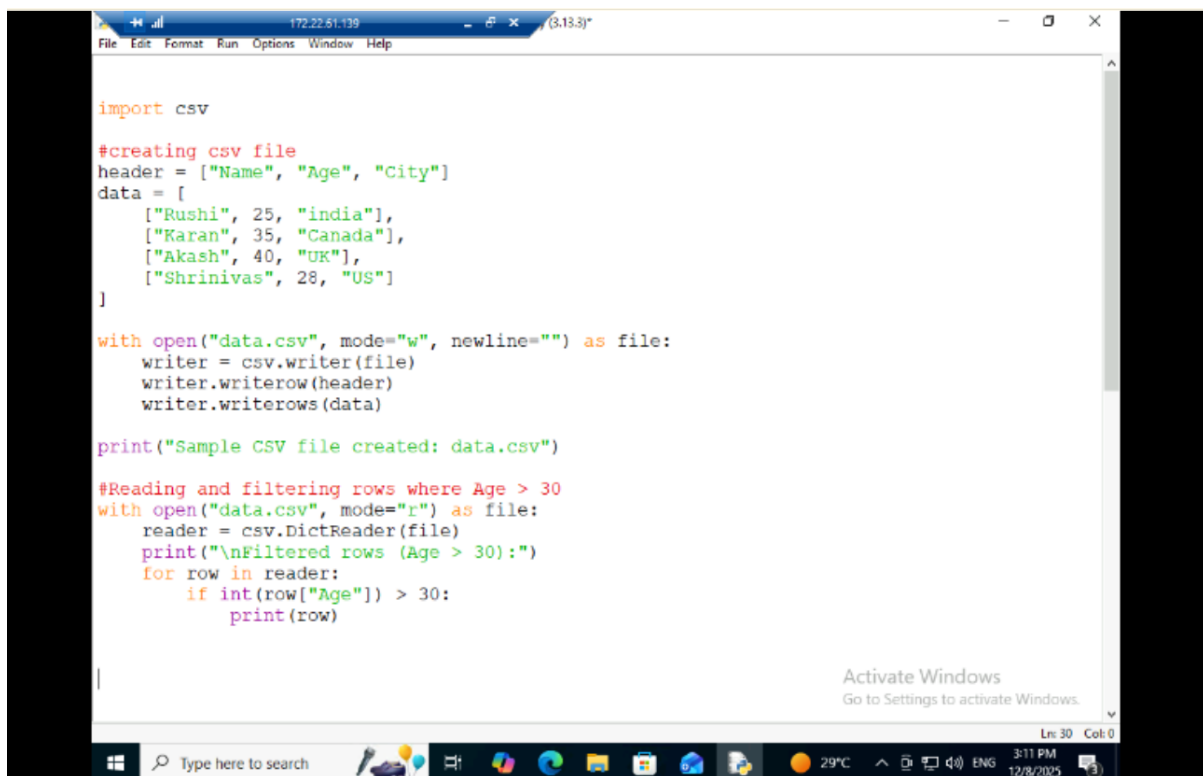
254 PM 12/8/2023



```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
Log file created.
>>>
===== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py =====
Number of ERROR lines: 2
>>>
```

**Q2(5) Read data.csv and filter the data to only include rows where the "Age" is greater than 30, then print these filtered rows.**



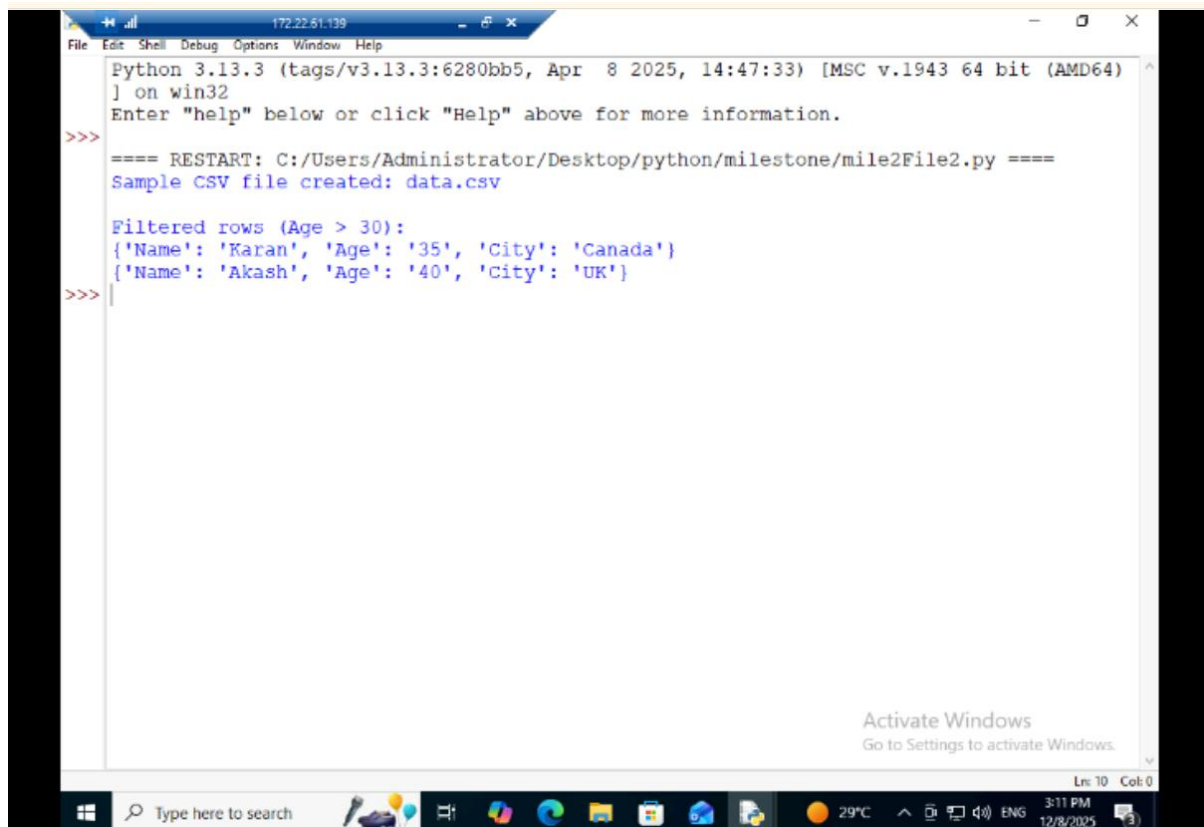
```
import csv

#creating csv file
header = ["Name", "Age", "City"]
data = [
    ["Rushi", 25, "india"],
    ["Karan", 35, "Canada"],
    ["Akash", 40, "UK"],
    ["Shrinivas", 28, "US"]
]

with open("data.csv", mode="w", newline="") as file:
    writer = csv.writer(file)
    writer.writerow(header)
    writer.writerows(data)

print("Sample CSV file created: data.csv")

#Reading and filtering rows where Age > 30
with open("data.csv", mode="r") as file:
    reader = csv.DictReader(file)
    print("\nFiltered rows (Age > 30):")
    for row in reader:
        if int(row["Age"]) > 30:
            print(row)
```



```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
Sample CSV file created: data.csv

Filtered rows (Age > 30):
{'Name': 'Karan', 'Age': '35', 'City': 'Canada'}
{'Name': 'Akash', 'Age': '40', 'City': 'UK'}
>>>
```

**Q2.(6) Create a new CSV file named inventory.csv from a list of dictionaries, where each dictionary represents an item with keys like "Item", "Quantity", and "Price".**



```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
File Edit Format Run Options Window Help
##print( NUMBER OF ERROR LINES: , count)

import csv
##
##with open("data.csv", "r") as file:
##    reader = csv.DictReader(file)
##    for row in reader:
##        if int(row["Age"]) > 30:
##            print(row)

inventory = [
    {"item": "Laptop", "Quantity": 10, "Price": 750},
    {"item": "Mouse", "Quantity": 50, "Price": 20},
    {"item": "Keyboard", "Quantity": 30, "Price": 45}
]

with open("inventory.csv", "w", newline="") as file:
    writer = csv.DictWriter(file, fieldnames=["item", "Quantity", "Price"])
    writer.writeheader()
    writer.writerows(inventory)

print("Inventory CSV created.")

Ln: 34 Col: 0
```

Activate Windows  
Go to Settings to activate Windows.

```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr 8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
File Edit Shell Debug Options Window Help
Enter "help" below or click "Help" above for more information.

>>>
==== RESTART: C:/Users/Administrator/Desktop/python/milestone/mile2File2.py ====
Inventory CSV created.
>>>

Ln: 6 Col: 0
```

Activate Windows  
Go to Settings to activate Windows.