

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

```
172.22.61.139 [3.13.3]
File Edit Format Run Options Window Help
# 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.

```
172.22.61.139 [3.13.3]
File Edit Format Run Options Window Help
# check if the word apple present or not

import re

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

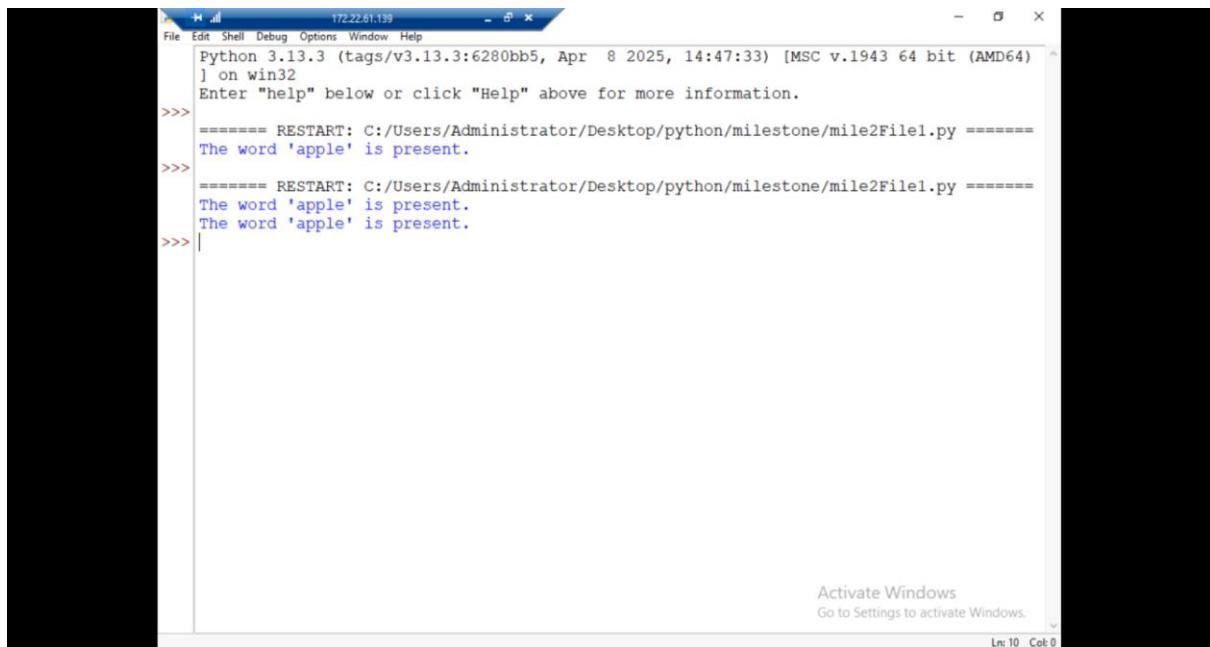
if re.search(pattern, sentence):
    print("The word 'apple' is present.")
else:
    print("The word 'apple' is not present.")

#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.

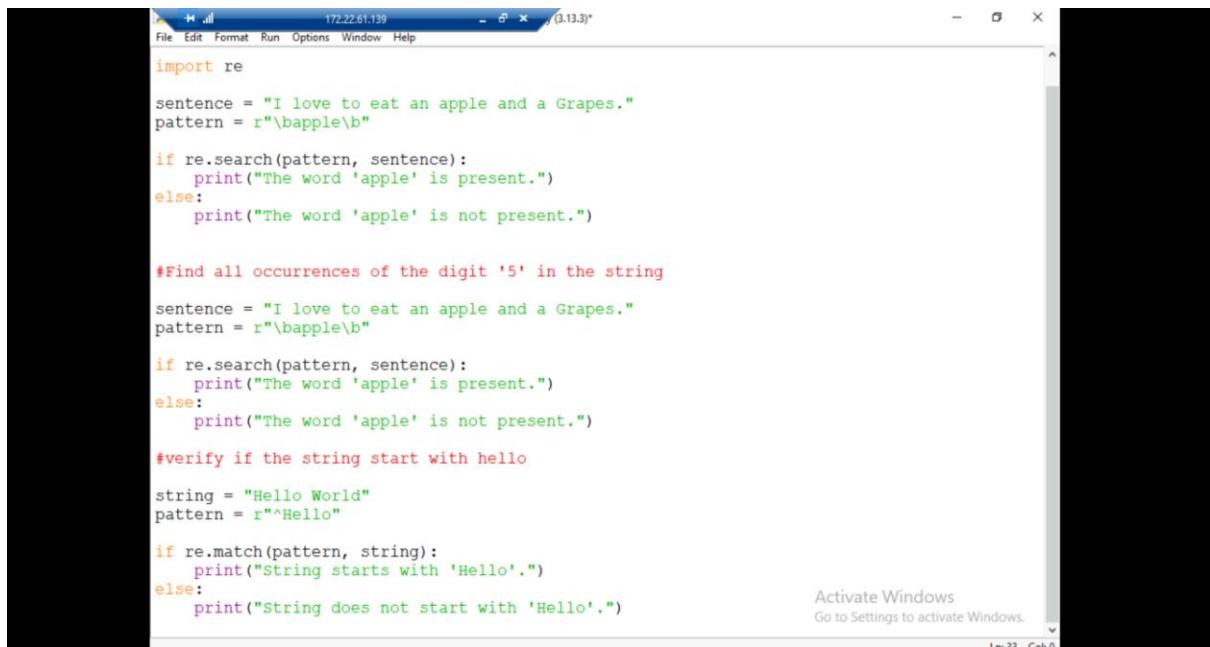
Ln: 10 Col: 0
```



```
172.22.61.139 - File Edit Shell Debug Options Window Help
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr  8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)]
l 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.
>>> |
```

Activate Windows
Go to Settings to activate Windows.

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



```
172.22.61.139 - File Edit Format Run Options Window Help
(3.13.3)*
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'.")
```

Activate Windows
Go to Settings to activate Windows.

A screenshot of a Windows terminal window titled "172.22.61.139". The window shows the Python 3.13.3 interpreter running three separate instances of a script named "mile2File1.py". The script prints the message "The word 'apple' is present." and "String starts with 'Hello'." Each run is preceded by a triple greater than sign (>>>>). The terminal also displays standard Python help information at the top.

```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr  8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)]  
l 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'.  
>>>
```

Activate Windows
Go to Settings to activate Windows.

Q2. (1) Rename an existing file (e.g., my_notes.txt to daily_journal.txt).

A screenshot of a Windows terminal window titled "172.22.61.139". The window shows a Python script being run. The script imports the os module and uses the os.rename function to rename "my_notes.txt" to "daily_journal.txt". It then prints a confirmation message. The terminal window has a title bar indicating "(3.13.3)".

```
#rename file in the system  
import os  
  
os.rename("my_notes.txt", "daily_journal.txt")  
print("File renamed successfully.")
```

Activate Windows
Go to Settings to activate Windows.

A screenshot of a Windows command-line interface (cmd) window titled "172.22.61.139". The window shows Python 3.13.3 running on Win32. The user has run the command `file renamed successfully.` which is displayed in blue text, indicating it is a printed statement from the script. The window also displays a watermark for activating Windows.

```
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr  8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)]
l 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 Windows command-line interface (cmd) window titled "172.22.61.139". The window shows Python 3.13.3 running on Win32. It displays a script that renames a file and then removes it. The output shows the file was renamed successfully and then deleted successfully. The window also displays a watermark for activating Windows.

```
#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 Windows desktop showing a Python 3.13.3 IDLE window. The window title is "172.22.61.139 (3.13.3)". The code in the editor is:

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

The status bar at the bottom right of the window says "Activate Windows Go to Settings to activate Windows."

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 Windows desktop showing a Python 3.13.3 IDLE window. The window title is "172.22.61.139 (3.13.3)". The code in the editor is:

```
#rename file in the system
import os

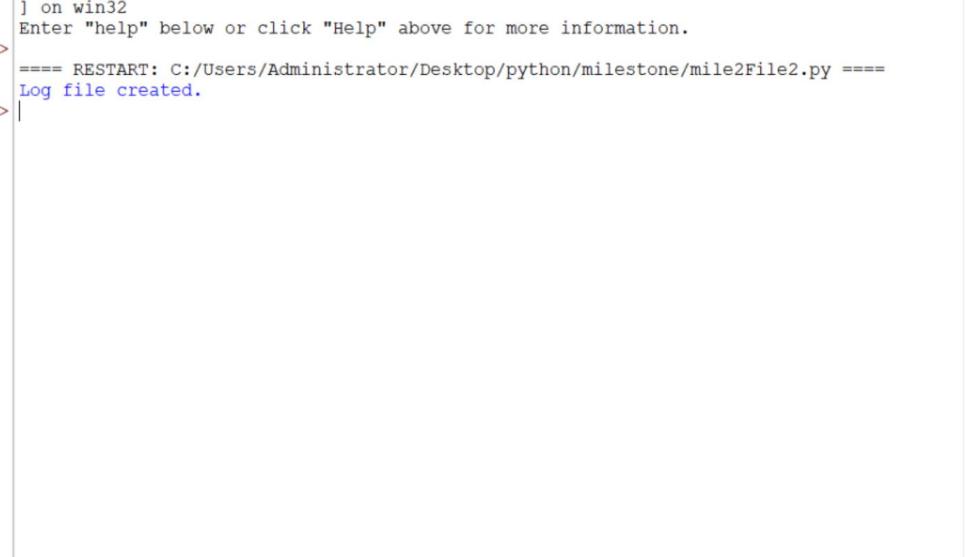
##os.rename("my_notes.txt", "daily_journal.txt")
##print("File renamed successfully.")

#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.")
```

The status bar at the bottom right of the window says "Activate Windows Go to Settings to activate Windows."



The screenshot shows a Python IDLE window with the following details:

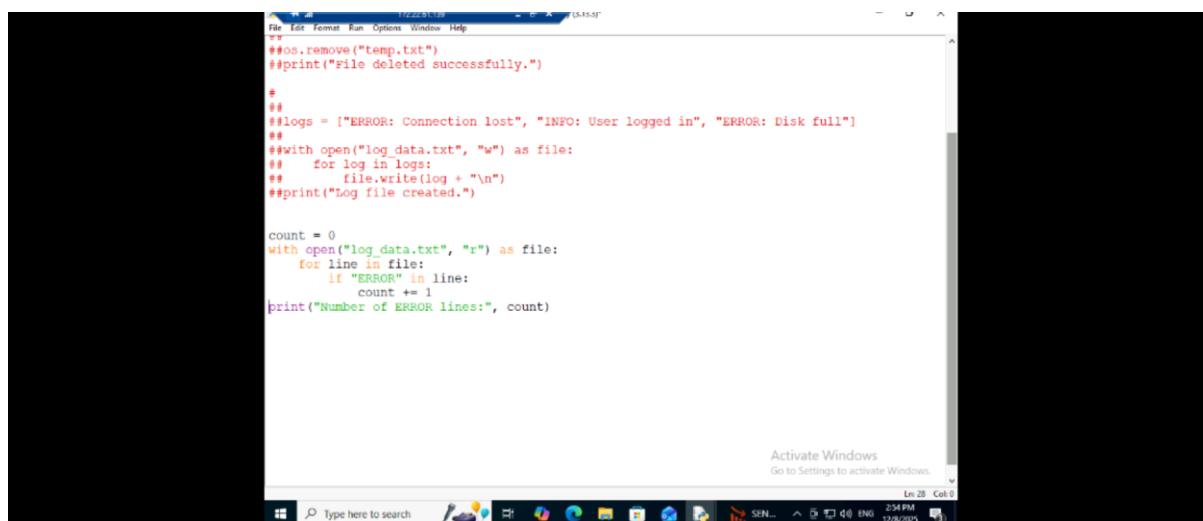
- Title Bar:** 172.22.61.139
- Menu Bar:** File Edit Shell Debug Options Window Help
- Text Area:**

```
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.

>>> |
```
- Bottom Status Bar:** Activate Windows Go to Settings to activate Windows.
- Bottom Right Corner:** Ln: 6 Col: 0

Q2.(4) Count the number of lines in log_data.txt that contain the word "ERROR".



```
File Edit Format Run Options Window Help
##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.

Le 28 Cob 0
```

A screenshot of a Windows desktop environment. At the top is the taskbar with icons for Start, Search, File Explorer, Edge, and others. The system tray shows the date as 12/8/2025, time as 2:55 PM, and battery level at 29%. In the center is a terminal window titled 'all' with the address bar '172.22.61.139'. The terminal window has a menu bar: File, Edit, Shell, Debug, Options, Window, Help. It displays Python 3.13.3 code and its execution:

```
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

>>>
```

The status bar at the bottom of the terminal window shows 'Ln: 9 Col: 0'. A watermark 'Activate Windows Go to Settings to activate Windows.' is visible in the center of the screen.

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.

A screenshot of a Windows desktop environment, similar to the one above. The taskbar and system tray are identical. The terminal window shows a Python script for reading and filtering a CSV file:

```
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)
```

The status bar at the bottom of the terminal window shows 'Ln: 30 Col: 0'. A watermark 'Activate Windows Go to Settings to activate Windows.' is visible in the center of the screen.

A screenshot of a Windows desktop environment. In the center is a terminal window titled 'all' with the IP address '172.22.61.139'. The window shows Python 3.13.3 running on win32. It displays code filtering rows where Age is greater than 30, resulting in two dictionaries: {'Name': 'Karan', 'Age': '35', 'City': 'Canada'} and {'Name': 'Akash', 'Age': '40', 'city': 'UK'}. Below the terminal is a taskbar with various icons, a search bar, and system status indicators like date and time.

```
Python 3.13.3 (tags/v3.13.3:6280bbb5, Apr  8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)]
] on win32
Enter "help" below or click "Help" above for more information.

>>> =====
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".

```
+4 all 172.22.61.139 - x (3.13.3)*
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.")

Activate Windows
Go to Settings to activate Windows.
Ln: 34 Col: 0
3:03 PM 29°C ENG 12/8/2025
```

```
+4 all 172.22.61.139 - x
File Edit Shell Debug Options Window Help
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 =====
Inventory CSV created.
>>>

Activate Windows
Go to Settings to activate Windows.
Ln: 6 Col: 0
3:04 PM 29°C ENG 12/8/2025
```