

File Edit Selection View Go Run ... 🔍 MileStone-4 ⚡

EXPLORER MILESTONE-4 .venv security_incidents.txt soc_rag_app.py

soc_rag_app.py X security_incidents.txt

439 | print("\nPlease try again or check your query format.")

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Python + ⚡

```
(.venv)
User@DESKTOP-0FU31RQ MINGW64 ~\MileStone-4
$ C:/Users/User/MileStone-4/.venv/Scripts/python.exe c:/Users/User/MileStone-4/soc_rag_app.py
User@DESKTOP-0FU31RQ MINGW64 ~\MileStone-4
$ C:/Users/User/MileStone-4/.venv/Scripts/python.exe c:/Users/User/MileStone-4/soc_rag_app.py

== STEP 1: LOAD DATA ==
Loaded 1 document(s)
Sample content (first 200 chars): Incident #001 | User=johns | Alert=Multiple failed SSH logins | SourceIP=10.1.1.9 | Host=SRV-LNX-01 | OS=Ubuntu 20 | MITRE=T1110 | Severity=High | Resolution=Blocked source IP; Reset password; Enabled

== STEP 2: CHUNKING ==
Created 20 chunks
Sample chunk: Incident #001 | User=johns | Alert=Multiple failed SSH logins | SourceIP=10.1.1.9 | Host=SRV-LNX-01 | OS=Ubuntu 20 | MITRE=T1110 | Severity=High | Res

== STEP 3: EMBEDDINGS + INDEX ==
c:\Users\User\MileStone-4\soc_rag_app.py:73: LangChainDeprecationWarning: The class `HuggingFaceEmbeddings` was deprecated in LangChain 0.2.2 and will be removed in 1.0. An updated version of the class exists in the `langchain-huggingface` package and should be used instead. To use it run `pip install -U langchain-huggingface` and import as `from langchain_huggingface import HuggingFaceEmbeddings``.
emb = HuggingFaceEmbeddings(model_name="sentence-transformers/all-MiniLM-L6-v2")
FAISS vectorstore created with vector retriever (k=4)

== BONUS: HYBRID RETRIEVAL ==
Hybrid retriever ready.

== STEP 4: RAG CHAIN ==
```

Activate Windows
Go to Settings to activate Windows.

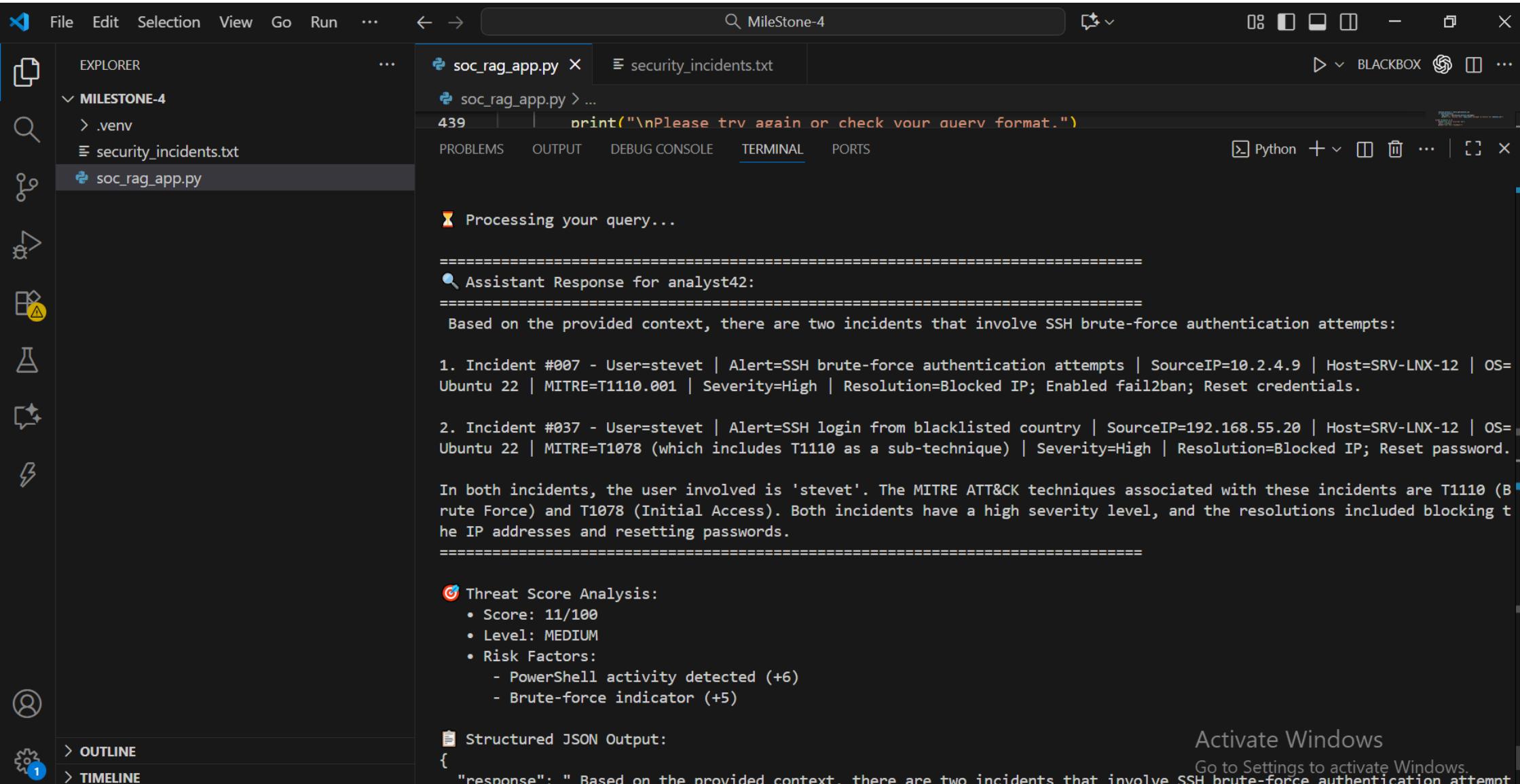
A screenshot of a terminal window within a dark-themed IDE interface. The terminal is titled "MileStone-4". The content of the terminal shows the execution of a Python script named "soc_rag_app.py". The script performs several steps:

- Step 4: RAG CHAIN - RAG chain constructed.
- BONUS: TOOL
- Step 5: MEMORY - Memory wrapper ready.
- Step 7: CONSOLE LOOP - Example queries listed:
 - analyst42 Show me all SSH brute force incidents
 - analyst42 What happened with user johns?
 - analyst42 Find Critical severity incidents
 - analyst42 Show me ransomware attacks
 - analyst42 What MITRE techniques are most common?
 - analyst42 Tell me about PowerShell attacks

The user enters a query: "analyst42 Show me all SSH brute force incidents". The terminal processes this query and displays the response: "Assistant Response for analyst42".

IDE UI Elements:

- File, Edit, Selection, View, Go, Run, ... menu bar
- Search bar: MileStone-4
- Toolbar icons: Save, Undo, Redo, Copy, Paste, Find, Select All, etc.
- Left sidebar: EXPLORER, MILESTONE-4 (containing .venv, security_incidents.txt, soc_rag_app.py), OUTLINE, and TIMELINE.
- Terminal tabs: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (selected), PORTS.
- Bottom right: Python extension icon, settings, and activate Windows message.



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EXPLORER soc_rag_app.py X security_incidents.txt

MILESTONE-4 > .venv security_incidents.txt soc_rag_app.py

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Structured JSON Output:

```
{ "response": "Based on the provided context, there are two incidents that involve SSH brute-force authentication attempts:\n\n1. Incident #007 - User=stevet | Alert=SSH brute-force authentication attempts | SourceIP=10.2.4.9 | Host=SRV-LNX-12 | OS=Ubuntu 22 | MITRE=T1110.001 | Severity=High | Resolution=Blocked IP; Enabled fail2ban; Reset credentials.\n\n2. Incident #037 - User=stevet | Alert=SSH login from blacklisted country | SourceIP=192.168.55.20 | Host=SRV-LNX-12 | OS=Ubuntu 22 | MITRE=T1078 (which includes T1110 as a sub-technique) | Severity=High | Resolution=Blocked IP; Reset password.\n\nIn both incidents, the user involved is 'stevet'. The MITRE ATT&CK techniques associated with these incidents are T1110 (Brute Force) and T1078 (Initial Access). Both incidents have a high severity level, and the resolutions included blocking the IP addresses and resetting passwords.", "entities": {}, "threat_analysis": { "score": 11, "level": "MEDIUM", "risk_factors": [ "PowerShell activity detected (+6)", "Brute-force indicator (+5)" ] }, "metadata": { "incident_count": 2, "has_resolution": true, "mitre_techniques": [] } }
```

Session Info: 2 messages in history for analyst42

Enter: <analyst_id> <query> (or q):

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