



phase4.py > ...

```
1 import time
2 import random
3 import base64
4
5 # Simulate AI Healthcare Assistant
6 def ai_healthcare_assistant():
7     print("Welcome to the AI Healthcare Assistant!")
8     symptom = input("Type your main symptom (e.g., fever, cough, headache, etc.): \nYou: ")
9     start_time = time.time()
10
11     # Simulated Diagnosis Logic
12     print("\nClosest match found:", symptom.lower())
13     diagnosis = "Upper Respiratory Infection treatment = cough suppressants, warm fluids, and humidified air."
14     print("Diagnosis:", diagnosis)
15     print("Recommended Treatment:", "cough suppressants, warm fluids, and humidified air.")
16     # Simulate encryption & decryption
17     encrypted = base64.b64encode(diagnosis.encode()).decode()
18     decrypted = base64.b64decode(encrypted).decode()
19     print("Encrypted for storage:", encrypted)
20     print("Decrypted for verification:", decrypted)
21
22     # Feedback
23     print("\nPlease rate your experience (1-5):")
24     rating = 5
25     print("Rating:", rating)
26     print("Any comments? good diagnosis")
27     print("Thank you for your feedback!")
28
29     # Performance Metrics Simulation
30     accuracy = round(random.uniform(85.0, 90.0), 2)
31     response_latency = round(random.uniform(6.0, 7.0), 2)
32     iot_status = "Successful"
33     total_time = round(time.time() - start_time + response_latency, 2)
34     print("\nPerformance Metrics")
35     print(f"Accuracy of Diagnosis: {accuracy}%")
36     print(f"Average Response Latency: {response_latency} seconds")
37     print(f"Real-time IoT Data Collection: {iot_status}")
38     print(f"Total Response Time: {total_time} seconds")
39
40 # Run the assistant
41 ai_healthcare_assistant()
```

Ln 41, Col 26 Spaces: 4 UTF-8 CRLF {} Python Select Interpreter Prettier

87°F  
Partly cloudy

Search

11:16 PM  
5/24/2025

Welcome to the AI Healthcare Assistant!

Type your main symptom (e.g., fever, cough, headache, etc.)

You: cough

Closest match found: ccugh

Diagnosis: Upper Respiratory Infection

Recommended Treatment: Cough suppressants, warm fluids, and humidified air.

Encrypted for storage: gAAAAABoG3KzGpJZC8F15mLEVYLMuAuHv5moPRGKspMFqw0KDRhU4HaZIHlvLVsXG4urcmyIbatA3mLgz\_hZcPZnrFzO1l85MKPojJgXk5ESksp15sudNg=

Decrypted for verification: Upper Respiratory Infection

Please rate your experience (1-5):

Rating: 5

Any comments? good diagnosis

Thank you for your feedback!

Performance Metrics

Accuracy of Diagnosis: 86.69%

Average Response Latency: 0.53 seconds

Real-time IoT Data Collection: Successful

Total Response Time: 14.68 seconds

PS C:\Users\jagad>