Q5 Python Scripting

Python Script

#A python script to parse a timestamp log file and extract timestamps and error messages and store output in json file.

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import re

import json

#A pip command to install the required libraries assuming the necessary libraries are stored in requirements.txt

#pip install -r requirements.txt

errors\_data = []

print("Enter timestamp log file path")

timestamplog\_file\_path = input()

print("Enter output json file path")

output\_file\_path = input()

with open(timestamplog\_file\_path, 'r') as log:

    log\_content = log.read()

    #Regular expression search to match error

    error\_pat = r'(\d{4}-\d{2}-\d{2} \d{2}:\d{2}:\d{2},\d{3}) - ERROR - (.\*?)(?=\d{4}-\d{2}-\d{2} \d{2}:\d{2}:\d{2},\d{3}|\Z)'

    #matching the errors pattern

    matches = re.findall(error\_pat, log\_content, re.DOTALL)

    for match in matches:

      timestamp = match[0]

      error\_message = match[1].strip()

      # Appending the extracted data to the list

      errors\_data.append({'timestamp': timestamp, 'error\_message': error\_message})

with open(output\_file\_path, 'w') as json\_file:

    # Dumping the extracted data to json file

    json.dump(errors\_data, json\_file)

    print("Successfully extracted error data and saved to {output\_file\_path}")

Outputs:



