```python
import pandas as pd
import mysql.connector
import time
import random

db_config = {
    'host': 'localhost',
    'user': 'root',
    'password': '-',
    'database': 'twitter_db'
}
tweets_df = pd.read_csv("tweet.csv")

# Connect to the MySQL database
conn = mysql.connector.connect(**db_config)
cursor = conn.cursor()

# Initialize tweet count and set time
start_time = time.time()
tweet_count = 0

# Iterate through the DataFrame and insert tweets into the database
for index, row in tweets_df.iterrows():
    user_id = row['USER_ID']
    tweet_text = row['TWEET_TEXT']

# Insert tweet into the database
    cursor.execute("INSERT INTO TWEET (user_id, tweet_text) VALUES (%s, %s)",
                   (user_id, tweet_text))
    tweet_count+=1

    # Check elapsed time
    current_time = time.time()
    elapsed_time = current_time - start_time

    # Check if one second has elapsed
    if elapsed_time >= 1:
        break

```

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40 # Commit changes
41 conn.commit()
42
43 # Print the results
44 print("Tweets successfully loaded into the database
   .")
45 print("Elapsed time:", elapsed_time)
46 print("Number of tweets processed in one second:",
   tweet_count)
47
48 # Function to retrieve home timeline for a random
   user
49 def getTimeline():
50     random_user_id = int(random.choice(tweets_df['
   USER_ID']))
51
52     cursor.execute(
53         "SELECT tweet_text FROM TWEET WHERE user_id
    IN (SELECT follows_id FROM Follows WHERE
   follows_id = %s) ORDER BY tweet_ts DESC LIMIT 10",
54         (random_user_id,))
55     home_timeline = cursor.fetchall()
56     return home_timeline
57
58
59 # Simulate users refreshing home timeline
60 num_home_timelines = 0
61 for _ in range(20000):  # Simulating 1 million home
    timeline refreshes
62     home_timeline = getTimeline()
63     num_home_timelines += 1
64
65     current_time = time.time()
66     elapsed_time = current_time - start_time
67     if elapsed_time >= 1:
68         break
69
70 # Close the connection
71 cursor.close()
72 conn.close()
73
```

```
74 # Print the results
75 print("Tweets successfully loaded into the
   database.")
76 print("Elapsed time:", elapsed_time)
77 print("Home timelines retrieved per second:",
   num_home_timelines / elapsed_time)
78
```