

Looking through packets, I found ONLY 1 UPD Stream. If we follow the stream, we can see a bunch of track data :

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timestamp,x,y,left_button_holding,right_button_holding1747145724.0702395,970,629,False, False1747145724.0813808,977,623,False, False1747145724.092615,979,621,False, False1747145724.1838828,977,619,False, False1747145724.1771524,976,618,False, False1747145724.1384137,967,610,False, False1747145724.149663,969,606,False, False1747145724.15095,1002,565,False, False1747145724.172323,1029,533,False, False1747145724.1836581,1082,461,False, False1747145724.194956,1101,428,False, False1747145724.2062562,1118,370,False, False1747145724.2176337,1123,321,False, False1747145724.2224087,1114,258,False, False1747145724.2346626,1103,233,False, False1747145724.252014,1066,155,False, False1747145724.2638865,1036,92,False, False1747145724.2748846,986,-10,False, False1747145724.2878364,963,-52,False, False1747145724.2971098,951,-44,False, False1747145724.308564,951,-13,False, False1747145724.3194215,952,-12,False, False1747145724.3311553,953,-1,False, False1747145724.5657015,954,0,False, False1747145724.576763,961,4,False, False1747145724.58803,976,15,False, False1747145724.599646,981,28,False, False1747145724.6117158,985,25,False, False, False1747145724.6228254,987,26,False, False, False1747145724.6334002,988,26,False, False1747145724.7463605,988,26,False, False1747145724.7576122,988,26,True, False1747145724.8137362,988,26,False, False1747145724.9931174,987,26,False, False1747145724.914499,978,26,False, False1747145724.9257812,997,28,False, False1747145724.993734,980,28,False, False1747145724.9483287,862,30,False, False, False1747145724.9696678,743,28,False, False, False1747145724.9719846,626,21,False, False1747145724.982562,558,19,False, False1747145724.995289,399,17,False, False1747145725.0054889,336,25,False, False1747145725.0167587,241,50,False, False1747145725.0291042,186,71,False, False1747145725.04138,192,141,False, False1747145725.052629,85,168,False, False1747145725.0641544,65,214,False, False1747145725.2095899,44,228,False, False1747145725.3016442,22,237,False, False1747145725.312372,14,244,False, False, False1747145725.3229785,7,262,False, False1747145725.3352995,7,277,False, False1747145725.346452,32,312,False, False1747145725.357518,46,327,False, False, False1747145725.3680077,73,361,False, False1747145725.3796838,84,372,False, False1747145725.3899343,98,378,False, False1747145725.4012375,98,384,False, False1747145725.4237752,191,387,False, False1747145725.43537,102,387,False, False1747145725.44369,193,387,False, False1747145725.45401,100,387,False, False1747145725.46538,111,387,False, False1747145725.47653,99,387,False, False1747145725.48774,102,387,False, False1747145725.50002,104,387,False, False1747145725.5112542,178,387,False, False1747145725.5224735,55446,387,False, False1747145725.533516,56073,387,False, False1747145725.54446,56073,387,False, False1747145725.55546,56073,387,False, False1747145725.56646,56073,387,False, False1747145725.57746,56073,387,False, False1747145725.58846,56073,387,False, False1747145725.5992155,230,356,False, False1747145725.6226682,247,353,False, False1747145725.6333516,253,352,False, False1747145725.6441486,254,352,False, False1747145725.655058,255,352,False, False1747145725.6673665,256,352,False, False1747145725.7430584,258,348,False, False1747145725.755184,258,343,False, False1747145725.7660763,260,343,False, False1747145725.776144,260,339,False, False1747145725.788923,261,334,False, False1747145725.7990763,261,331,False, False1747145725.8114998,261,328,False, False1747145725.8229766,262,327,False, False1747145725.8342378,262,327,False, False1747145725.8552232,262,326,False, False1747145725.8669858,262,325,False, False1747145725.889917,262,324,False, False1747145725.9021847,263,322,False, False1747145725.9133554,263,320,False,
```

The idea is to draw this track data and get the flag thanks to this code :

```
import re
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

data =
"timestamp,x,y,left_button_holding,right_button_holding1747145724.0702395,95,970,629,False, False1747145724.0813808,977..."

matches =
re.findall(r'(\d+\.\d+),(\d+),(\d+),(False|True),(False|True)', data)
df = pd.DataFrame(matches, columns=['timestamp', 'x', 'y', 'left_button', 'right_button'])

df['timestamp'] = df['timestamp'].astype(float)
df['x'] = df['x'].astype(int)
df['y'] = df['y'].astype(int)
df['left_button'] = df['left_button'] == 'True'
df['right_button'] = df['right_button'] == 'True'

print(f"🔍 Analizând {len(df)} puncte pentru pattern-ul Zodiac Killer...")

plt.figure(figsize=(15, 10))

plt.subplot(2, 2, 1)
plt.plot(df['x'], df['y'], 'b.-', markersize=2, alpha=0.7)
plt.title('Traекторia Mouse - Vedere generală')
plt.grid(True, alpha=0.3)

plt.subplot(2, 2, 2)
plt.scatter(df[df['left_button']]['x'], df[df['left_button']]['y'],
            c='red', s=100, alpha=0.7)
plt.title('Click-uri Stânga (selectii)')
plt.grid(True, alpha=0.3)
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```

plt.subplot(2, 2, 3)
plt.scatter(df[df['right_button']] ['x'], df[df['right_button']] ['y'],
            c='green', s=100, alpha=0.7, marker='s')
plt.title('Click-uri Dreapta (meniuri)')
plt.grid(True, alpha=0.3)

plt.subplot(2, 2, 4)
plt.hexbin(df['x'], df['y'], gridsize=30, cmap='Blues')
plt.colorbar(label='Densitate')
plt.title('Heatmap - Zone frecventate')

plt.tight_layout()
plt.show()

click_points = df[df['left_button'] | df['right_button']]
if not click_points.empty:
    print("📍 Puncte cu click-uri:")
    for idx, row in click_points.iterrows():
        print(f"    ({row['x']}, {row['y']}) - Left: {row['left_button']}, Right: {row['right_button']}")

print(f"\n{12} Range coordonate: X({df['x'].min()}-{df['x'].max()}), Y({df['y'].min()}-{df['y'].max()})")

from scipy import stats

coords = df[['x', 'y']].values
if len(coords) > 10:
    from sklearn.cluster import KMeans
    kmeans = KMeans(n_clusters=min(5, len(coords)//10))
    df['cluster'] = kmeans.fit_predict(coords)

    plt.figure(figsize=(10, 8))
    scatter = plt.scatter(df['x'], df['y'], c=df['cluster'],
                          cmap='tab10', alpha=0.6)
    plt.colorbar(scatter, label='Cluster')
    plt.title('Cluster-uri de activitate')
    plt.show()

print("\nEXPORTAND coordonatele importante...")
important_points = df[df['left_button'] | df['right_button'] |
(df['x'].diff().abs() > 50) | (df['y'].diff().abs() > 50)]

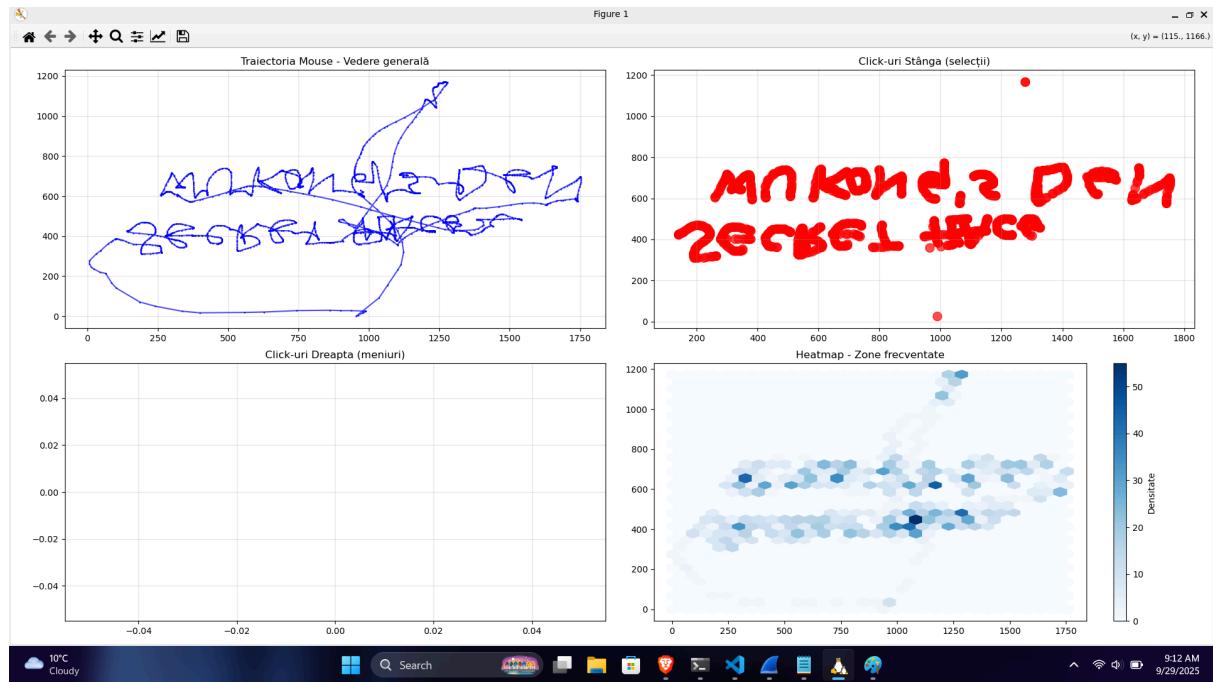
```

```

if not important_points.empty:
    print("📝 Puncte importante (click-uri sau salturi mari):")
    for idx, row in important_points.iterrows():
        print(f"    Timestamp: {row['timestamp']:.2f}, Pos: ({row['x']}, {row['y']}), "
{row['y']}),
                f"Left: {row['left_button']}, Right: "
{row['right_button']}")

```

It's not necessary the whole code anyway, but you can visualise the flag in 4 methods. The output is :



We got the flag. We can see that it's vertical flipped. If we paste the text from the top right into paint and flip it, we can get the flag :

THE FLAG : ctf{secretplacewukong'sden} (or ctf{secretplacewukong'sden})
~Z4que