

**Name:** "Real-Time BGP Data Analysis for Prefix 41.221.215.0/24"

**Instruction:** "Collect BGP update data for the target prefix (41.221.215.0/24) over a specified collection period of 900 seconds (15 minutes). During each 5-minute interval of the collection period, record prefix announcements and withdrawals for the target prefix. For each interval, plot the top 10 AS Paths with the most announcements for the prefix during the last 5 minutes of that interval. Repeat this process until the total collection period is reached."

**Input:** "Target Prefix: 41.221.215.0/24; Total Collection Period: 900 seconds (15 minutes)"

**Output:**

```
import pybgpstream
import pandas as pd
...
target_prefix = "41.221.215.0/24"
prefix_announcements_df = pd.DataFrame(columns=['Time',
'AS Path', 'Count'])
withdrawals_df = pd.DataFrame(columns=['Time', 'AS Path',
'Count'])

stream = pybgpstream.BGPStream(
    project="ris-live",
    record_type="updates",
)

start_time = time.time()

for rec in stream.records():
    current_time = time.strftime('%Y-%m-%d %H:%M:%S',
time.gmtime(rec.time))
    if 300 < time.time() - start_time:
        ...
```