ASSIGNMENT NO 2(GROUP B)

mapper.py

```python
#!/usr/bin/env python3
import sys

for line in sys.stdin:
    parts = line.strip().split()
    if len(parts) > 0:
        ip = parts[0]
        print(f"{ip}\t1")
```

reducer.py

```python
#!/usr/bin/env python3
import sys

current_ip = None
current_count = 0

for line in sys.stdin:
    ip, count = line.strip().split("\t")
    count = int(count)

    if current_ip == ip:
        current_count += count
    else:
        if current_ip:
            print(f"{current_ip}\t{current_count}")
        current_ip = ip
        current_count = count

# Print last IP
if current_ip:
    print(f"{current_ip}\t{current_count}")
```

access.log

192.168.1.1 - - [12/Apr/2025:10:34:00 +0000] "GET /index.html HTTP/1.1" 200 1043
192.168.1.2 - - [12/Apr/2025:10:35:01 +0000] "POST /login HTTP/1.1" 401 560
192.168.1.1 - - [12/Apr/2025:10:36:02 +0000] "GET /about HTTP/1.1" 200 789
10.0.0.1 - - [12/Apr/2025:10:36:10 +0000] "GET /contact HTTP/1.1" 200 230
172.16.0.2 - - [12/Apr/2025:10:37:15 +0000] "GET /products HTTP/1.1" 200 1056
192.168.1.3 - - [12/Apr/2025:10:38:20 +0000] "GET /index.html HTTP/1.1" 200 1043
10.0.0.2 - - [12/Apr/2025:10:38:33 +0000] "POST /api/login HTTP/1.1" 403 245
192.168.1.1 - - [12/Apr/2025:10:39:40 +0000] "GET /dashboard HTTP/1.1" 200 1280
192.168.1.4 - - [12/Apr/2025:10:41:12 +0000] "GET /help HTTP/1.1" 404 312
172.16.0.2 - - [12/Apr/2025:10:42:01 +0000] "GET /faq HTTP/1.1" 200 902
192.168.1.2 - - [12/Apr/2025:10:42:18 +0000] "GET /profile HTTP/1.1" 200 540
10.0.0.1 - - [12/Apr/2025:10:43:30 +0000] "GET /products HTTP/1.1" 200 1056
192.168.1.3 - - [12/Apr/2025:10:44:20 +0000] "GET /index.html HTTP/1.1" 200 1043
192.168.1.2 - - [12/Apr/2025:10:45:01 +0000] "POST /logout HTTP/1.1" 200 600
192.168.1.4 - - [12/Apr/2025:10:45:22 +0000] "GET /terms HTTP/1.1" 404 318
10.0.0.2 - - [12/Apr/2025:10:46:10 +0000] "GET /login HTTP/1.1" 200 450
192.168.1.1 - - [12/Apr/2025:10:47:05 +0000] "GET /settings HTTP/1.1" 200 950
172.16.0.2 - - [12/Apr/2025:10:48:12 +0000] "GET /support HTTP/1.1" 200 1002
192.168.1.3 - - [12/Apr/2025:10:49:20 +0000] "POST /contact HTTP/1.1" 200 370
10.0.0.1 - - [12/Apr/2025:10:50:30 +0000] "GET /home HTTP/1.1" 200 1023

OUPPUT:-

```
hadoop@mmcoe-System-Product-Name:~/Desktop$ chmod +x mapper.py reducer.py
hadoop@mmcoe-System-Product-Name:~/Desktop$ cat access.log | ./mapper.py | sort |
./reducer.py
10.0.0.1 3
10.0.0.2 2
172.16.0.2 3
192.168.1.1 4
192.168.1.2 3
192.168.1.3 3
192.168.1.4 2
hadoop@mmcoe-System-Product-Name:~/Desktop$ ^C
hadoop@mmcoe-System-Product-Name:~/Desktop$
```