

Practical - 13 Implement your own Ping Program

Aim:

To implement a program that sends ICMP Echo Requests (ping) to a host & displays the response time.

Code:

```
import os
import platform
import subprocess

def ping(host="google.com", count=4):
    Param = "-n" if platform.system().lower() <="windows" else "-c"
    command = ["Ping", Param, str(count), host]

    try:
        output = subprocess.check_output(
            command, universal_newlines=True
        )
        print(output)
    except Exception as e:
        print(f"Ping failed: {e}")

if __name__ == "__main__":
    ping("8.8.8.8")
```

Input:

ping("8.8.8.8")

Output:

PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data
64 bytes from 8.8.8.8: icmp_seq=1 ttl=118
time=5.2ms

Result:

The program successfully pinged 8.8.8.8 & displayed the round trip time for each packet, demonstrating network connectivity using Python.