B. Implement your own ping programme

Aim To implement ping program

Algorithm

1) Detect the operating system to decide which ping flag to use (-n for window, -c for others)

2) Construct the system ping command with the target host and count.

3) Execute the ping command using subprocess, check-output() and capture the result

4) Display the ping output or an error message id it fails.

Program

```
import os
import platform
import subprocess
def ping (host = "google.com", count = 0):
    param = "-n" id 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")
```

output :-

pinging 8.8.8.8 with 32 bytes of data

Reply from 8.8.8.8 : bytes = 32 time = 20ms
    TTL = 117
    Reply from 8.8.8.8 : bytes = 32 time = 22 ms
    TTL = 117
    ping statistics for 8.8.8.8
packets : sent = 4, Received = 4, Lost 0 (0% Loss)
    Approximate round trip times in
                                    milli seconds
Minimum - 20ms, Maximum = 22 ms. Average = 21ms

Result

    Thus the implementation of ping
program have been executed successfully.