

```
(student@kali)-[~]
$ ping www.google.com
PING www.google.com (142.250.182.4) 56(84) bytes of data.
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=1 ttl=120 time=3.47 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=2 ttl=120 time=3.93 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=3 ttl=120 time=3.77 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=4 ttl=120 time=3.57 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=5 ttl=120 time=3.67 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=6 ttl=120 time=3.55 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=7 ttl=120 time=3.68 ms
64 bytes from maa05s18-in-f4.1e100.net (142.250.182.4): icmp_seq=8 ttl=120 time=3.94 ms
^C
--- www.google.com ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7013ms
rtt min/avg/max/mdev = 3.468/3.696/3.939/0.161 ms

(student@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.16.52.152 netmask 255.255.252.0 broadcast 172.16.55.255
    inet6 fe80::8aae:ddff:fe15:db24 prefixlen 64 scopeid 0x20<link>
    ether 88:ae:dd:15:db:24 txqueuelen 1000 (Ethernet)
    RX packets 100941 bytes 67340498 (64.2 MiB)
    RX errors 0 dropped 2214 overruns 0 frame 0
    TX packets 38235 bytes 10458587 (9.9 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 25 bytes 1520 (1.4 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 25 bytes 1520 (1.4 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

Non-authoritative answer:
Name: www.google.com
Address: 142.250.182.4
Name: www.google.com
Address: 2404:6800:4007:819::2004
```

The screenshot shows a Kali Linux desktop environment. In the foreground, a window titled "MyTraceroute" is open. It has a dark theme and a title bar with standard window controls. The window contains a form with "Hostname:" set to "google.com" and a "1.00" value next to a minus and plus button. There are buttons for "Pause", "Restart", "About", and "Quit". Below this is a table showing traceroute results. The table has columns: Hostname, Loss, Snt, Last, Avg, Best, Worst, and StDev. The data shows a path from a gateway to google.com via several intermediate IP addresses, all with 0.0% loss. In the background, a terminal window is open, showing the installation of the "mtr" package using "sudo apt install mtr-tiny". The terminal output includes the package name, summary, and the command "mtr google.com" which has been executed.

```
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

MyTraceroute

Hostname: google.com 1.00 — + Pause Restart About Quit



| Hostname                           | Loss | Snt | Last | Avg | Best | Worst | StDev |
|------------------------------------|------|-----|------|-----|------|-------|-------|
| _gateway                           | 0.0% | 29  | 0    | 0   | 0    | 1     | 0.27  |
| static-41.229.249.49-tataidc.co.in | 0.0% | 29  | 77   | 10  | 2    | 83    | 23.12 |
| 142.250.171.162                    | 0.0% | 29  | 2    | 3   | 2    | 14    | 2.83  |
| 142.251.227.217                    | 0.0% | 29  | 4    | 9   | 3    | 51    | 11.89 |
| 142.251.55.223                     | 0.0% | 28  | 2    | 3   | 2    | 14    | 2.29  |
| maa05s24-in-f14.1e100.net          | 0.0% | 28  | 3    | 4   | 2    | 18    | 3.50  |



sudo apt install mtr-tiny
(student@kali)-[~]
$ sudo apt install mtr
Installing:
mtr

Summary:
Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 885
Download size: 83.4 kB
Space needed: 215 kB / 111 GB available

Get:1 http://http.kali.org/kali kali-rolling/main amd64 mtr amd64 0.95-1.1+b1 [83.4 kB]
Fetched 83.4 kB in 1s (125 kB/s)
Selecting previously unselected package mtr.
(Reading database ... 498213 files and directories currently installed.)
Preparing to unpack .../mtr_0.95-1.1+b1_amd64.deb ...
Unpacking mtr (0.95-1.1+b1) ...
Setting up mtr (0.95-1.1+b1) ...
Processing triggers for man-db (2.12.1-1) ...
Processing triggers for kali-menu (2023.4.7) ...

(student@kali)-[~]
$
(student@kali)-[~]
$ mtr google.com
```

```
(student@kali)-[~]  
$ ip address show  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host noprefixroute  
        valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 88:ae:dd:15:db:24 brd ff:ff:ff:ff:ff:ff  
    inet 172.16.52.152/22 brd 172.16.55.255 scope global noprefixroute eth0  
        valid_lft forever preferred_lft forever  
    inet6 fe80::8aae:ddff:fe15:db24/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
  
(student@kali)-[~]  
$
```