3 . Explore traceroute/tracert for different websites eg:google.com and analyse the

parameters in the output and explore different options for traceroute command

tracert google.com :

```
PS C:\Users\pavan> tracert google.com

Tracing route to google.com [2404:6800:4007:823::200e]
over a maximum of 30 hops:

  1     1 ms     1 ms     1 ms  2405:201:c057:f032:4a55:5eff:fe7e:6de1
  2     *        *        *     Request timed out.
  3    27 ms    26 ms    27 ms  2405:200:100::1:0:63a
  4     *        *        *     Request timed out.
  5    24 ms    25 ms    24 ms  2405:200:876:3168:61::4
  6     *        *        *     Request timed out.
  7    29 ms    30 ms    30 ms  2405:200:801:700::ae8
  8     *        *        *     Request timed out.
  9     *        *        *     Request timed out.
 10     *       42 ms     *     2001:4860:1:1::15aa
 11    42 ms    41 ms    42 ms  2404:6800:8137::1
 12     *        *        *     Request timed out.
 13    37 ms    36 ms    36 ms  2001:4860:0:1::55d7
 14    36 ms    36 ms    36 ms  maa03s38-in-x0e.1e100.net [2404:6800:4007:823::200e]
```

tracert -4 google.com   Uses only IPv4 :

```
PS C:\Users\pavan> tracert -4 google.com

Tracing route to google.com [142.250.195.14]
over a maximum of 30 hops:

  1     1 ms     1 ms     1 ms  reliance.reliance [192.168.29.1]
  2     5 ms     4 ms     4 ms  10.106.144.1
  3    16 ms    15 ms    16 ms  172.16.5.10
  4    16 ms    16 ms    15 ms  192.168.247.202
  5    20 ms    21 ms    20 ms  192.168.230.212
  6    19 ms    19 ms    19 ms  192.168.230.194
  7    20 ms    18 ms    20 ms  192.168.59.110
  8     *        *        *     Request timed out.
  9     *        *        *     Request timed out.
 10     *        *        *     Request timed out.
 11    28 ms    31 ms    28 ms  142.251.71.187
 12    27 ms    27 ms    28 ms  172.253.70.166
 13    49 ms    49 ms    50 ms  142.251.246.208
 14     *       92 ms    60 ms  192.178.83.215
 15    50 ms    50 ms    49 ms  142.251.52.211
 16    48 ms    48 ms    48 ms  del12s09-in-f14.1e100.net [142.250.195.14]
```

tracert -6 google.com   Uses only IPv6 :

```
PS C:\Users\pavan> tracert -6 google.com

Tracing route to google.com [2404:6800:4007:823::200e]
over a maximum of 30 hops:

  1     3 ms     2 ms     2 ms  2405:201:c057:f032:4a55:5eff:fe7e:6de1
  2     *        *        *     Request timed out.
  3    28 ms    27 ms    28 ms  2405:200:100::1:0:63a
  4     *        *        *     Request timed out.
  5    24 ms    24 ms    24 ms  2405:200:876:3168:61::4
  6     *        *        *     Request timed out.
  7    30 ms    30 ms    30 ms  2405:200:801:700::ae8
  8     *        *        *     Request timed out.
  9     *        *        *     Request timed out.
 10     *        *        *     Request timed out.
 11    42 ms    44 ms    41 ms  2404:6800:8137::1
 12     *        *        *     Request timed out.
 13    36 ms    36 ms    36 ms  2001:4860:0:1::55d7
 14    35 ms    35 ms    36 ms  maa03s38-in-x0e.1e100.net [2404:6800:4007:823::200e]

Trace complete.
```

tracert -d google.com   No DNS resolution, show only Ips :

```
PS C:\Users\pavan> tracert -d google.com

Tracing route to google.com [2404:6800:4009:823::200e]
over a maximum of 30 hops:

  1     4 ms     1 ms     1 ms  2405:201:c057:f032:4a55:5eff:fe7e:6de1
  2     *        *        *     Request timed out.
  3    20 ms    21 ms    21 ms  2405:200:100::1:0:63a
  4     *        *        *     Request timed out.
  5    19 ms    19 ms    19 ms  2405:200:876:3168:61::4
  6     *        *        *     Request timed out.
  7    21 ms     *        *     2405:200:801:700::aec
  8     *        *        *     Request timed out.
  9    54 ms    89 ms    31 ms  2001:4860:1:1::16a
 10    31 ms    34 ms    31 ms  2001:4860:1:1::16a
 11    93 ms    90 ms    66 ms  2404:6800:8202:140::1
 12     *        *        *     Request timed out.
 13     *        *        *     Request timed out.
 14    38 ms    37 ms    37 ms  2001:4860::9:4001:b922
 15    55 ms    55 ms    54 ms  2001:4860::9:4002:d931
 16    57 ms    56 ms    56 ms  2001:4860:0:1::876b
 17    56 ms    56 ms    56 ms  2001:4860:0:1::f69
 18    55 ms    56 ms    55 ms  2404:6800:4009:823::200e

Trace complete.
```

tracert -h 10 google.com   Setting max hops to 10 :

```
PS C:\Users\pavan> tracert -h 10 google.com

Tracing route to google.com [2404:6800:4009:823::200e]
over a maximum of 10 hops:

  1      9 ms      4 ms      7 ms  2405:201:c057:f032:4a55:5eff:fe7e:6de1
  2      *         *         *     Request timed out.
  3     22 ms     22 ms     22 ms  2405:200:100::1:0:63a
  4      *         *         *     Request timed out.
  5     20 ms     23 ms     19 ms  2405:200:876:3168:61::4
  6      *         *         *     Request timed out.
  7     21 ms     22 ms     21 ms  2405:200:801:700::aec
  8      *         *         *     Request timed out.
  9     76 ms     57 ms     30 ms  2001:4860:1:1::16a
 10     31 ms     32 ms     31 ms  2001:4860:1:1::16a

Trace complete.
```

pavan> tracert -w 100 google.com :

```
PS C:\Users\pavan> tracert -w 100 google.com

Tracing route to google.com [2404:6800:4009:823::200e]
over a maximum of 30 hops:

  1      2 ms      1 ms      1 ms  2405:201:c057:f032:4a55:5eff:fe7e:6de1
  2      *         *         *     Request timed out.
  3     21 ms     21 ms     23 ms  2405:200:100::1:0:63a
  4      *         *         *     Request timed out.
  5     19 ms     19 ms     19 ms  2405:200:876:3168:61::4
  6      *         *         *     Request timed out.
  7     21 ms      *        26 ms  2405:200:801:700::aec
  8      *         *         *     Request timed out.
  9     31 ms     33 ms     34 ms  2001:4860:1:1::16a
 10     31 ms     31 ms     31 ms  2001:4860:1:1::16a
 11     36 ms     37 ms     39 ms  2404:6800:8202:140::1
 12      *         *         *     Request timed out.
 13     32 ms      *         *     2001:4860:0:1::8826
 14     37 ms     37 ms     38 ms  2001:4860::9:4001:b922
 15     54 ms     58 ms     55 ms  2001:4860::9:4002:d931
 16     56 ms     56 ms     55 ms  2001:4860:0:1::876b
 17     56 ms     57 ms      *     2001:4860:0:1::f69
 18      *        93 ms     55 ms  bom12s13-in-x0e.1e100.net [2404:6800:4009:823::200e]
```