

1)

a)

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C:\Users\m-a-p>tracert www.google.com

Tracing route to www.google.com [2800:3f0:4005:400::2004]
over a maximum of 30 hops:

  1   4 ms    <1 ms    <1 ms  2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
  2   12 ms   4 ms     3 ms  2800:bf0:1fff:f700::1
  3   1 ms     1 ms     1 ms  fd00:0:0:a51::1
  4   2 ms     2 ms     2 ms  2001:4860:1:1::1c18
  5   13 ms   13 ms   13 ms  2800:2a0:21:10::16
  6   14 ms   14 ms   14 ms  2800:3f0:8050::1
  7   15 ms   15 ms   15 ms  2001:4860:0:1::4d98
  8   15 ms   15 ms   15 ms  2001:4860:0:1::11f5
  9   14 ms   14 ms   14 ms  2800:3f0:4005:400::2004
```

ipv6.addr == 2800:3f0:4005:400::2004						
.	Time	Source	Destination	Protocol	Length	Info
40	2.400235	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=211, hop limit=1 (no response found!)
42	2.404633	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
43	2.405161	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=212, hop limit=1 (no response found!)
44	2.405578	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
45	2.405849	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=213, hop limit=1 (no response found!)
46	2.406243	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
57	3.422370	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=214, hop limit=2 (no response found!)
58	3.434449	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
59	3.435527	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=215, hop limit=2 (no response found!)
60	3.439719	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
61	3.440515	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=216, hop limit=2 (no response found!)
62	3.443672	2800:bf0:1fff:f700:c..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
84	4.462185	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=217, hop limit=3 (no response found!)
85	4.463895	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
86	4.464404	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=218, hop limit=3 (no response found!)
87	4.465949	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
88	4.466304	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=219, hop limit=3 (no response found!)
89	4.467623	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
103	5.476547	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=220, hop limit=4 (no response found!)
104	5.478741	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
105	5.479187	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=221, hop limit=4 (no response found!)
106	5.481197	2001:4860:1:1::dib	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
107	5.481489	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=222, hop limit=4 (no response found!)
108	5.483538	2001:4860:1:1::1c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
135	6.574823	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=223, hop limit=5 (no response found!)
136	6.587800	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
137	6.589378	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=224, hop limit=5 (no response found!)
138	6.602492	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
139	6.603732	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=225, hop limit=5 (no response found!)
142	6.616958	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
157	7.619908	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=226, hop limit=6 (no response found!)
158	7.634544	2800:3f0:8050::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
159	7.635042	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=227, hop limit=6 (no response found!)
160	7.649472	2800:3f0:8050::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
161	7.649872	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=228, hop limit=6 (no response found!)
162	7.664401	2800:3f0:8050::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
179	8.656467	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=229, hop limit=7 (no response found!)
188	8.672189	2001:4860:0:1::4d98	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
181	8.673045	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=230, hop limit=7 (no response found!)
182	8.688487	2001:4860:0:1::4d98	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
183	8.689701	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=231, hop limit=7 (no response found!)
184	8.705129	2001:4860:0:1::4d98	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
203	9.775729	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=232, hop limit=8 (no response found!)
204	9.791316	2001:4860:0:1::11f5	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
205	9.792125	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=233, hop limit=8 (no response found!)
206	9.807507	2001:4860:0:1::11f5	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
207	9.808403	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=234, hop limit=8 (no response found!)
208	9.823929	2001:4860:0:1::11f5	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
223	10.893730	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=235, hop limit=9 (reply in 224)
224	10.908362	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=235, hop limit=119 (request in 223)
225	10.909350	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=236, hop limit=9 (reply in 226)
226	10.923789	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=236, hop limit=119 (request in 225)
228	10.924698	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=237, hop limit=9 (reply in 229)
229	10.939034	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=237, hop limit=119 (request in 228)

```
C:\Users\m-a-p>tracert -4 www.google.com

Tracing route to www.google.com [142.250.78.164]
over a maximum of 30 hops:

  1    <1 ms      <1 ms      <1 ms  192.168.100.1
  2     8 ms       4 ms       4 ms  host-186-4-145-1.netlife.ec [186.4.145.1]
  3     3 ms       2 ms       1 ms  10.224.51.118
  4     3 ms       2 ms       3 ms  186.3.125.46
  5    19 ms      15 ms      15 ms  142.250.163.95
  6    15 ms      15 ms      15 ms  72.14.233.63
  7    17 ms      16 ms      16 ms  142.250.210.135
  8    15 ms      15 ms      15 ms  bog02s19-in-f4.1e100.net [142.250.78.164]

Trace complete.
```

No.	Time	Source	Destination	Protocol	Length	Info
8082	146.930870	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=172/44032, ttl=1 (no response found!)
8083	146.931395	192.168.100.1	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
8084	146.931694	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=173/44288, ttl=1 (no response found!)
8085	146.931967	192.168.100.1	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
8086	146.932199	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=174/44544, ttl=1 (no response found!)
8087	146.932428	192.168.100.1	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
8178	152.461788	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=175/44800, ttl=2 (no response found!)
8179	152.469911	186.4.145.1	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8180	152.470609	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=176/45056, ttl=2 (no response found!)
8181	152.474914	186.4.145.1	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8182	152.475448	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=177/45312, ttl=2 (no response found!)
8183	152.480051	186.4.145.1	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8208	153.651781	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=178/45568, ttl=3 (no response found!)
8209	153.654773	10.224.51.118	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8210	153.655254	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=179/45824, ttl=3 (no response found!)
8211	153.657303	10.224.51.118	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8212	153.657567	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=180/46088, ttl=3 (no response found!)
8213	153.659471	10.224.51.118	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8307	159.192433	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=181/46336, ttl=4 (no response found!)
8308	159.195534	186.3.125.46	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8309	159.195895	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=182/46592, ttl=4 (no response found!)
8310	159.198339	142.250.163.94	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
8311	159.198612	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=183/46848, ttl=4 (no response found!)
8312	159.201656	186.3.125.46	192.168.100.22	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
9704	164.725750	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=184/47104, ttl=5 (no response found!)
9705	164.772051	142.250.163.95	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
9706	164.772458	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=185/47360, ttl=5 (no response found!)
9707	164.787712	142.250.163.95	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
9708	164.788331	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=186/47616, ttl=5 (no response found!)
9709	164.803596	142.250.163.95	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11344	170.380461	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=187/47872, ttl=6 (no response found!)
11356	170.395997	72.14.233.63	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11351	170.396338	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=188/48128, ttl=6 (no response found!)
11353	170.411775	72.14.233.63	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11354	170.412215	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=189/48384, ttl=6 (no response found!)
11355	170.427473	72.14.233.63	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11778	176.817687	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=190/48640, ttl=7 (no response found!)
11779	176.834842	142.250.210.135	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11780	176.836590	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=191/48896, ttl=7 (no response found!)
11781	176.853369	142.250.210.135	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
11782	176.854104	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=192/49152, ttl=7 (no response found!)
11783	176.871014	142.250.210.135	192.168.100.22	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
15208	181.597992	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=193/49408, ttl=8 (reply in 15209)
15209	181.613435	142.250.78.164	192.168.100.22	ICMP	106	Echo (ping) reply id=0x0001, seq=193/49408, ttl=119 (request in 15208)
15210	181.614736	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=194/49664, ttl=8 (reply in 15211)
15211	181.630013	142.250.78.164	192.168.100.22	ICMP	106	Echo (ping) reply id=0x0001, seq=194/49664, ttl=119 (request in 15210)
15212	181.630866	192.168.100.22	142.250.78.164	ICMP	106	Echo (ping) request id=0x0001, seq=195/49920, ttl=8 (reply in 15213)
15213	181.646376	142.250.78.164	192.168.100.22	ICMP	106	Echo (ping) reply id=0x0001, seq=195/49920, ttl=119 (request in 15212)

```
C:\Users\m-a-p>tracert -R www.google.com
```

```
Tracing route to www.google.com [2800:3f0:4005:401::2004]  
over a maximum of 30 hops:
```

1	<1 ms	<1 ms	<1 ms	2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
2	9 ms	3 ms	3 ms	2800:bf0:1fff:f700::1
3	1 ms	1 ms	1 ms	fd00:0:0:a51::1
4	4 ms	3 ms	2 ms	2001:4860:1:1::1c18
5	14 ms	14 ms	14 ms	2800:2a0:21:10::16
6	*	*	*	Request timed out.
7	*	*	*	Request timed out.
8	*	*	*	Request timed out.
9	*	*	*	Request timed out.
10	*	*	*	Request timed out.
11	*	*	*	Request timed out.
12	*	*	*	Request timed out.
13	*	*	*	Request timed out.
14	*	*	*	Request timed out.
15	*	*	*	Request timed out.
16	*	*	*	Request timed out.
17	*	*	*	Request timed out.
18	*	*	*	Request timed out.
19	*	*	*	Request timed out.
20	*	*	*	Request timed out.
21	*	*	*	Request timed out.
22	*	*	*	Request timed out.
23	*	*	*	Request timed out.
24	*	*	*	Request timed out.
25	*	*	*	Request timed out.
26	*	*	*	Request timed out.
27	*	*	*	Request timed out.
28	*	*	*	Request timed out.
29	*	*	*	Request timed out.
30	*	*	*	Request timed out.

```
Trace complete.
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21331 461.645467	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=273, hop limit=12 (no response found!)
21376 465.639470	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=274, hop limit=13 (no response found!)
21440 469.644441	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=275, hop limit=13 (no response found!)
21489 473.644071	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=276, hop limit=13 (no response found!)
21528 477.638254	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=277, hop limit=14 (no response found!)
21590 481.645307	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=278, hop limit=14 (no response found!)
21620 485.644400	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=279, hop limit=14 (no response found!)
21769 489.634674	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=280, hop limit=15 (no response found!)
21938 493.637865	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=281, hop limit=15 (no response found!)
23256 497.631493	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=282, hop limit=15 (no response found!)
23389 501.636422	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=283, hop limit=16 (no response found!)
23879 505.645306	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=284, hop limit=16 (no response found!)
23935 509.636035	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=285, hop limit=16 (no response found!)
23992 513.638552	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=286, hop limit=17 (no response found!)
24038 517.642215	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=287, hop limit=17 (no response found!)
24244 521.632689	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=288, hop limit=17 (no response found!)
24279 525.641142	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=289, hop limit=18 (no response found!)
24357 529.631979	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=290, hop limit=18 (no response found!)
25620 533.634703	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=291, hop limit=18 (no response found!)
25797 537.632610	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=292, hop limit=19 (no response found!)
25945 541.641435	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=293, hop limit=19 (no response found!)
25984 545.635441	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=294, hop limit=19 (no response found!)
26054 549.643296	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=295, hop limit=20 (no response found!)
26131 553.645861	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=296, hop limit=20 (no response found!)
26166 557.643089	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=297, hop limit=20 (no response found!)
26237 561.637150	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=298, hop limit=21 (no response found!)
26273 565.635430	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=299, hop limit=21 (no response found!)
28058 569.644200	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=300, hop limit=21 (no response found!)
28526 573.630595	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=301, hop limit=22 (no response found!)
28994 577.636681	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=302, hop limit=22 (no response found!)
29073 581.634299	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=303, hop limit=22 (no response found!)
29182 585.646283	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=304, hop limit=23 (no response found!)
29195 589.637404	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=305, hop limit=23 (no response found!)
29396 593.630631	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=306, hop limit=23 (no response found!)
29532 597.639699	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=307, hop limit=24 (no response found!)
29658 601.639533	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=308, hop limit=24 (no response found!)
30045 605.641608	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=309, hop limit=24 (no response found!)
30121 609.646087	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=310, hop limit=25 (no response found!)
31544 613.631793	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=311, hop limit=25 (no response found!)
31594 617.639609	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=312, hop limit=25 (no response found!)
31721 621.630245	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=313, hop limit=26 (no response found!)
31829 625.635396	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=314, hop limit=26 (no response found!)
32089 629.637145	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=315, hop limit=26 (no response found!)
32143 633.634198	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=316, hop limit=27 (no response found!)
32376 637.640609	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=317, hop limit=27 (no response found!)
37170 641.644501	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=318, hop limit=27 (no response found!)
56991 645.643300	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=319, hop limit=28 (no response found!)
88178 649.642206	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=320, hop limit=28 (no response found!)
1210.. 653.640602	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=321, hop limit=28 (no response found!)
1210.. 653.640602	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=321, hop limit=28 (no response found!)
1366.. 657.640512	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=322, hop limit=29 (no response found!)
1434.. 661.638540	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=323, hop limit=29 (no response found!)
1440.. 665.640791	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=324, hop limit=29 (no response found!)
1662.. 669.640274	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=325, hop limit=30 (no response found!)
1663.. 673.635659	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=326, hop limit=30 (no response found!)
1707.. 677.639988	2800:bf0:100:1150:c...	2800:bf0:100:1150:c92f:b22e:669d.. ICMPv6	150 Echo (ping) request id=0x0001, seq=327, hop limit=30 (no response found!)

Tracing route to www.google.com [2800:3f0:4005:40a::2004]
over a maximum of 30 hops:

1	<1 ms	<1 ms	<1 ms	2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
2	27 ms	4 ms	4 ms	2800:bf0:1fff:f700::1
3	2 ms	1 ms	1 ms	fd00:0:0:0:a51::1
4	2 ms	2 ms	2 ms	2001:4860:1:1::1c18
5	13 ms	13 ms	12 ms	2800:2a0:21:10::16
6	12 ms	13 ms	12 ms	2800:3f0:804d::1
7	15 ms	15 ms	15 ms	2001:4860:0:1::4d94
8	13 ms	12 ms	13 ms	2001:4860:0:1::4da1
9	13 ms	13 ms	13 ms	2800:3f0:4005:40a::2004

Trace complete.

2418.. 831.864164	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=328, hop limit=1 (no response found!)
2418.. 831.864794	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 831.865119	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=329, hop limit=1 (no response found!)
2418.. 831.865589	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 831.865846	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=330, hop limit=1 (no response found!)
2418.. 831.866079	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 832.879667	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=331, hop limit=2 (no response found!)
2418.. 832.907523	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 832.908026	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=332, hop limit=2 (no response found!)
2418.. 832.912680	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 832.913109	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=333, hop limit=2 (no response found!)
2418.. 832.917823	2800:bf0:ffff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 833.929887	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=334, hop limit=3 (no response found!)
2418.. 833.931451	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 833.931973	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=335, hop limit=3 (no response found!)
2418.. 833.933406	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 833.933760	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=336, hop limit=3 (no response found!)
2418.. 833.935130	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 834.963326	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=337, hop limit=4 (no response found!)
2418.. 834.965649	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 834.966075	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=338, hop limit=4 (no response found!)
2418.. 834.968859	2001:4860:1:1::d1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2418.. 834.969172	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=339, hop limit=4 (no response found!)
2418.. 834.971288	2001:4860:1:1::ic18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 836.059634	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=340, hop limit=5 (no response found!)
2419.. 836.072621	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 836.073272	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=341, hop limit=5 (no response found!)
2419.. 836.086294	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 836.086740	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=342, hop limit=5 (no response found!)
2419.. 836.099566	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 837.094710	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=343, hop limit=6 (no response found!)
2419.. 837.107600	2800:3f0:804d::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 837.108037	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=344, hop limit=6 (no response found!)
2419.. 837.121082	2800:3f0:804d::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 837.121465	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=345, hop limit=6 (no response found!)
2419.. 837.134303	2800:3f0:804d::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 838.149775	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=346, hop limit=7 (no response found!)
2419.. 838.165501	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 838.165895	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=347, hop limit=7 (no response found!)
2419.. 838.181511	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 838.182104	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=348, hop limit=7 (no response found!)
2419.. 838.197759	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 839.262907	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=349, hop limit=8 (no response found!)
2419.. 839.279543	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 839.276414	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=350, hop limit=8 (no response found!)
2419.. 839.289348	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2419.. 839.289920	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=351, hop limit=8 (no response found!)
2419.. 839.302899	2001:4860:0:1::4d94	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
2420.. 840.366894	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=352, hop limit=9 (reply in 242003)
2420.. 840.379824	2800:3f0:4005:40a::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=352, hop limit=119 (request in 242002)
2420.. 840.380282	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=353, hop limit=9 (reply in 242005)
2420.. 840.393362	2800:3f0:4005:40a::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=353, hop limit=119 (request in 242004)
2420.. 840.393905	2800:bf0:100:1150:c..	2800:3f0:4005:40a::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=354, hop limit=9 (reply in 242008)
2420.. 840.406871	2800:3f0:4005:40a::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=354, hop limit=119 (request in 242006)

```
C:\Users\m-a-p>tracert -4 www.google.com

Tracing route to www.google.com [172.217.28.100]
over a maximum of 30 hops:

 1    <1 ms      <1 ms      <1 ms    192.168.100.1
 2      8 ms       4 ms       4 ms  host-186-4-145-1.netlife.ec [186.4.145.1]
 3      2 ms       1 ms       1 ms   10.224.51.118
 4      2 ms       5 ms       2 ms   186.3.125.46
 5     14 ms      13 ms      13 ms   142.250.163.95
 6     13 ms      13 ms      13 ms   72.14.233.63
 7     14 ms      14 ms      14 ms   216.239.56.245
 8     13 ms      13 ms      13 ms gru06s09-in-f100.1e100.net [172.217.28.100]

Trace complete.
```

2499.. 955.337688	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=196/50176, ttl=1 (no response found!)
2499.. 955.338249	192.168.100.1	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2499.. 955.338608	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=197/50432, ttl=1 (no response found!)
2499.. 955.338989	192.168.100.1	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2499.. 955.339259	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=198/50688, ttl=1 (no response found!)
2499.. 955.339516	192.168.100.1	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 960.867879	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=199/50944, ttl=2 (no response found!)
2501.. 960.885488	186.4.145.1	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 960.886168	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=200/51200, ttl=2 (no response found!)
2501.. 960.890467	186.4.145.1	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 960.891398	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=201/51456, ttl=2 (no response found!)
2501.. 960.895534	186.4.145.1	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 961.901679	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=202/51712, ttl=3 (no response found!)
2501.. 961.904581	18.224.51.118	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 961.905144	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=203/51968, ttl=3 (no response found!)
2501.. 961.907049	18.224.51.118	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2501.. 961.907320	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=204/52224, ttl=3 (no response found!)
2501.. 961.909110	18.224.51.118	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2503.. 967.432897	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=205/52480, ttl=4 (no response found!)
2503.. 967.435678	74.125.146.39	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2503.. 967.437479	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=206/52736, ttl=4 (no response found!)
2503.. 967.442459	142.250.163.94	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2503.. 967.442913	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=207/52992, ttl=4 (no response found!)
2503.. 967.445334	186.3.125.46	192.168.100.22	ICMP	70 Time-to-live exceeded (Time to live exceeded in transit)
2505.. 973.617771	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=208/53248, ttl=5 (no response found!)
2505.. 973.632151	142.250.163.95	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2505.. 973.632713	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=209/53504, ttl=5 (no response found!)
2505.. 973.646092	142.250.163.95	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2505.. 973.646476	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=210/53760, ttl=5 (no response found!)
2505.. 973.659889	142.250.163.95	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2508.. 979.235866	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=211/54016, ttl=6 (no response found!)
2508.. 979.249586	72.14.233.63	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2508.. 979.249935	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=212/54272, ttl=6 (no response found!)
2508.. 979.263338	72.14.233.63	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2508.. 979.263714	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=213/54528, ttl=6 (no response found!)
2508.. 979.277160	72.14.233.63	192.168.100.22	ICMP	134 Time-to-live exceeded (Time to live exceeded in transit)
2509.. 984.818633	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=214/54784, ttl=7 (no response found!)
2509.. 984.833256	216.239.56.245	192.168.100.22	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
2509.. 984.833742	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=215/55040, ttl=7 (no response found!)
2509.. 984.848012	216.239.56.245	192.168.100.22	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
2509.. 984.862578	216.239.56.245	192.168.100.22	ICMP	110 Time-to-live exceeded (Time to live exceeded in transit)
2510.. 990.450936	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=217/55552, ttl=8 (reply in 251058)
2510.. 990.464588	172.217.28.100	192.168.100.22	ICMP	106 Echo (ping) reply id=0x0001, seq=217/55552, ttl=119 (request in 251057)
2510.. 990.465069	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=218/55808, ttl=8 (reply in 251060)
2510.. 990.478373	172.217.28.100	192.168.100.22	ICMP	106 Echo (ping) reply id=0x0001, seq=218/55808, ttl=119 (request in 251059)
2510.. 990.479022	192.168.100.22	172.217.28.100	ICMP	106 Echo (ping) request id=0x0001, seq=219/56064, ttl=8 (reply in 251062)
2510.. 990.492353	172.217.28.100	192.168.100.22	ICMP	106 Echo (ping) reply id=0x0001, seq=219/56064, ttl=119 (request in 251061)

```
C:\Users\m-a-p>tracert www.google.com
```

Tracing route to www.google.com [2800:3f0:4005:400::2004]
over a maximum of 30 hops:

1	<1 ms	<1 ms	<1 ms	2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
2	8 ms	4 ms	4 ms	2800:bf0:1fff:f700::1
3	1 ms	1 ms	1 ms	fd00:0:0:a51::1
4	2 ms	2 ms	2 ms	2800:2a0:21:10::15
5	13 ms	13 ms	13 ms	2800:2a0:21:10::16
6	13 ms	13 ms	13 ms	2800:3f0:804b::1
7	13 ms	13 ms	13 ms	2001:4860:0:1::4d8e
8	118 ms	19 ms	14 ms	2001:4860:0:1::16f1
9	13 ms	12 ms	12 ms	2800:3f0:4005:400::2004

Trace complete.

1019	13.787753	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=436, hop limit=1 (no response found!)
1020	13.788361	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1021	13.788659	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=437, hop limit=1 (no response found!)
1022	13.789071	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1023	13.789318	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=438, hop limit=1 (no response found!)
1024	13.789638	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1228	14.800502	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=439, hop limit=2 (no response found!)
1229	14.809384	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1230	14.810290	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=440, hop limit=2 (no response found!)
1231	14.814529	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1232	14.814992	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=441, hop limit=2 (no response found!)
1233	14.819617	2800:bf0:1ffff:f700:...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1253	15.825601	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=442, hop limit=3 (no response found!)
1254	15.827263	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1255	15.828141	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=443, hop limit=3 (no response found!)
1256	15.829566	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1257	15.829860	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=444, hop limit=3 (no response found!)
1258	15.831273	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1268	16.834964	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=445, hop limit=4 (no response found!)
1269	16.837249	2001:4860:1::1:dib	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1270	16.837688	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=446, hop limit=4 (no response found!)
1271	16.839658	2001:4860:1::1:c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1272	16.840299	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=447, hop limit=4 (no response found!)
1273	16.842301	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1454	17.854355	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=448, hop limit=5 (no response found!)
1455	17.867601	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1456	17.868270	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=449, hop limit=5 (no response found!)
1457	17.881416	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1458	17.882537	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=450, hop limit=5 (no response found!)
1459	17.895805	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1473	18.890662	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=451, hop limit=6 (no response found!)
1474	18.904235	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1475	18.904958	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=452, hop limit=6 (no response found!)
1476	18.918543	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1477	18.919243	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=453, hop limit=6 (no response found!)
1478	18.933061	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1487	19.925492	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=454, hop limit=7 (no response found!)
1488	19.938766	2001:4860:0::1:4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1489	19.940136	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=455, hop limit=7 (no response found!)
1490	19.953137	2001:4860:0::1:4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1491	19.953588	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=456, hop limit=7 (no response found!)
1492	19.966638	2001:4860:0::1:4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1670	21.054624	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=457, hop limit=8 (no response found!)
1674	21.173031	2001:4860:0::1:16f1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1675	21.174812	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=458, hop limit=8 (no response found!)
1676	21.193918	2001:4860:0::1:16f1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1677	21.194505	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=459, hop limit=8 (no response found!)
1678	21.208721	2001:4860:0::1:16f1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
1784	22.280270	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=460, hop limit=9 (reply in 1705)
1785	22.293386	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=460, hop limit=119 (request in 1704)
1786	22.294145	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=461, hop limit=9 (reply in 1707)
1787	22.307014	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=461, hop limit=119 (request in 1706)
1788	22.307472	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=462, hop limit=9 (reply in 1709)
1799	22.320281	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=462, hop limit=119 (request in 1708)

```
C:\Users\m-a-p>tracert www.google.com

Tracing route to www.google.com [2800:3f0:4005:400::2004]
over a maximum of 30 hops:

 1    <1 ms      6 ms      <1 ms    2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
 2      9 ms      3 ms      3 ms    2800:bf0:1fff:f700::1
 3      1 ms      2 ms      1 ms    fd00:0:0:a51::1
 4      2 ms      2 ms      2 ms    2001:4860:1::1:d1b
 5     13 ms     13 ms     12 ms    2800:2a0:21:10::16
 6    147 ms     27 ms     20 ms    2800:3f0:804b::1
 7     13 ms     13 ms     13 ms    2001:4860:0::1:4d8e
 8    282 ms    362 ms    172 ms    2001:4860:0::1:16f1
 9     13 ms     13 ms     13 ms    2800:3f0:4005:400::2004

Trace complete.
```

18560	148.041728	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=463, hop limit=1 (no response found!)	
18561	148.042442	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18562	148.044528	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=464, hop limit=1 (no response found!)	
18600	148.050479	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18601	148.051115	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=465, hop limit=1 (no response found!)	
18602	148.051964	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18914	149.062185	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=466, hop limit=2 (no response found!)	
18915	149.071158	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18916	149.071695	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=467, hop limit=2 (no response found!)	
18917	149.075197	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18918	149.075716	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=468, hop limit=2 (no response found!)	
18920	149.079293	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18929	150.080894	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=469, hop limit=3 (no response found!)	
18930	150.082461	fd00:0:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18931	150.082981	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=470, hop limit=3 (no response found!)	
18932	150.085100	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18933	150.085483	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=471, hop limit=3 (no response found!)	
18934	150.087226	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18947	151.101059	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=472, hop limit=4 (no response found!)	
18948	151.103325	2001:4860:1:1::c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18949	151.103755	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=473, hop limit=4 (no response found!)	
18950	151.105922	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
18951	151.106241	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=474, hop limit=4 (no response found!)	
18952	151.108742	2001:4860:1:1::d1b	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19323	152.197993	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=475, hop limit=5 (no response found!)	
19324	152.211107	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19325	152.211497	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=476, hop limit=5 (no response found!)	
19326	152.224520	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19327	152.224915	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=477, hop limit=5 (no response found!)	
19328	152.237783	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19353	153.229793	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=478, hop limit=6 (no response found!)	
19358	153.377003	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19359	153.377590	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=479, hop limit=6 (no response found!)	
19361	153.405324	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19361	153.405788	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=480, hop limit=6 (no response found!)	
19362	153.426333	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19385	154.423452	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=481, hop limit=7 (no response found!)	
19388	154.436368	2001:4860:0:1::d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19387	154.436993	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=482, hop limit=7 (no response found!)	
19388	154.449836	2001:4860:0:1::d1f1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19389	154.450297	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=483, hop limit=7 (no response found!)	
19390	154.463330	2001:4860:0:1::d48e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19628	155.543866	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=484, hop limit=8 (no response found!)	
19829	155.826774	2001:4860:0:1::1f6f	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19830	155.827811	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=485, hop limit=8 (no response found!)	
19840	156.190699	2001:4860:0:1::1f6f	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19841	156.191238	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=486, hop limit=8 (no response found!)	
19843	156.363777	2001:4860:0:1::1f6f	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)	
19854	157.278000	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=487, hop limit=9 (reply in 19855)	
19855	157.291232	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=487, hop limit=119 (request in 19854)	
19856	157.291794	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=488, hop limit=9 (reply in 19857)	
19857	157.304804	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=488, hop limit=119 (request in 19856)	
19858	157.305310	2800:bf0:100:1150:c..	2800:3f0:4005:400::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=489, hop limit=9 (reply in 19859)	
-	19859	157.318295	2800:3f0:4005:400::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=489, hop limit=119 (request in 19858)

```
C:\Users\m-a-p>tracert www.google.com
```

Tracing route to www.google.com [2800:3f0:4005:408::2004]
over a maximum of 30 hops:

1	<1 ms	<1 ms	<1 ms	2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
2	7 ms	4 ms	3 ms	2800:bf0:1fff:f700::1
3	1 ms	2 ms	1 ms	fd00:0:0:a51::1
4	2 ms	2 ms	2 ms	2001:4860:1:1:c18
5	13 ms	21 ms	13 ms	2800:2a0:21:10::16
6	87 ms	63 ms	37 ms	2800:3f0:8047::1
7	13 ms	13 ms	12 ms	2001:4860:0:1:471e
8	16 ms	13 ms	20 ms	2001:4860:0:1:4d8b
9	13 ms	13 ms	12 ms	2800:3f0:4005:408::2004

Trace complete.

18560	148.041728	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=463, hop limit=1 (no response found!)
18561	148.042442	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18562	148.044528	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=464, hop limit=1 (no response found!)
18563	148.050479	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18601	148.051115	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=465, hop limit=1 (no response found!)
18602	148.051964	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18914	149.062185	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=466, hop limit=2 (no response found!)
18915	149.071158	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18916	149.071695	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=467, hop limit=2 (no response found!)
18917	149.075197	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18918	149.075716	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=468, hop limit=2 (no response found!)
18920	149.079293	2800:bf0:1fff:f700::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18929	150.080964	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=469, hop limit=3 (no response found!)
18930	150.082461	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18931	150.082981	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=470, hop limit=3 (no response found!)
18932	150.085100	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18933	150.085483	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=471, hop limit=3 (no response found!)
18934	150.086726	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18947	151.101059	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=472, hop limit=4 (no response found!)
18948	151.103325	2001:4860:1::1:1c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18949	151.103755	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=473, hop limit=4 (no response found!)
18950	151.105922	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
18951	151.106241	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=474, hop limit=4 (no response found!)
18952	151.108742	2001:4860:1::1:dib	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19323	152.197993	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=475, hop limit=5 (no response found!)
19324	152.211107	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19325	152.211497	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=476, hop limit=5 (no response found!)
19326	152.224520	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19327	152.224915	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=477, hop limit=5 (no response found!)
19328	152.237783	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19353	153.229791	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=478, hop limit=6 (no response found!)
19358	153.377003	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19359	153.377590	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=479, hop limit=6 (no response found!)
19360	153.405324	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19361	153.405788	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=480, hop limit=6 (no response found!)
19362	153.426333	2800:3f0:804b::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19385	154.423452	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=481, hop limit=7 (no response found!)
19386	154.436368	2001:4860:0:1::4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19387	154.436903	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=482, hop limit=7 (no response found!)
19388	154.449836	2001:4860:0:1::4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19389	154.450297	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=483, hop limit=7 (no response found!)
19390	154.463336	2001:4860:0:1::4d8e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19828	155.543860	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=484, hop limit=8 (no response found!)
19829	155.582674	2001:4860:0:1::1f61	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19830	155.827811	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=485, hop limit=8 (no response found!)
19840	156.198699	2001:4860:0:1::1f61	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19841	156.191238	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=486, hop limit=8 (no response found!)
19843	156.363777	2001:4860:0:1::1f61	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174	Time Exceeded (hop limit exceeded in transit)
19854	157.278000	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=487, hop limit=9 (reply in 19855)
19855	157.291323	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=487, hop limit=119 (request in 19854)
19856	157.291794	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=488, hop limit=9 (reply in 19857)
19857	157.304804	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=488, hop limit=119 (request in 19856)
19858	157.305310	2800:bf0:100:1150:c...	2800:3f0:4005:400::2004	ICMPv6	126	Echo (ping) request id=0x0001, seq=489, hop limit=9 (reply in 19859)
19859	157.318295	2800:3f0:4005:400::...	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126	Echo (ping) reply id=0x0001, seq=489, hop limit=119 (request in 19858)

```
C:\Users\m-a-p>tracert www.google.com

Tracing route to www.google.com [2800:3f0:4005:408::2004]
over a maximum of 30 hops:

 1    <1 ms      <1 ms      <1 ms      2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
 2      7 ms       3 ms       3 ms      2800:bf0:1fff:f700::1
 3      6 ms       1 ms       1 ms      fd00:0:0:a51::1
 4     31 ms      10 ms      2 ms      2800:2a0:21:10::15
 5     13 ms      13 ms      13 ms      2800:2a0:21:10::16
 6    377 ms     264 ms     768 ms     2800:3f0:8047::1
 7     13 ms      13 ms      13 ms      2001:4860:0:1::471e
 8      *      517 ms     223 ms      2001:4860:0:1::4d8b
 9     13 ms      12 ms      13 ms      2800:3f0:4005:408::2004

Trace complete.
```

65794	385.667358	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=544, hop limit=1 (no response found!)
65795	385.667980	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
65796	385.668337	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=545, hop limit=1 (no response found!)
65797	385.668723	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
65798	385.670280	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=546, hop limit=1 (no response found!)
65799	385.670546	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66443	386.688714	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=547, hop limit=2 (no response found!)
66444	386.697276	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66445	386.698066	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=548, hop limit=2 (no response found!)
66446	386.702379	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66447	386.702816	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=549, hop limit=2 (no response found!)
66448	386.706637	2800:bf0:1fff:f700:..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66449	387.712293	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=550, hop limit=3 (no response found!)
66450	387.713810	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66459	387.714192	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=551, hop limit=3 (no response found!)
66460	387.715811	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66461	387.716132	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=552, hop limit=3 (no response found!)
66462	387.717651	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66480	388.728342	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=553, hop limit=4 (no response found!)
66481	388.731297	2001:4860:1::1:db	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66482	388.731717	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=554, hop limit=4 (no response found!)
66483	388.736068	2001:4860:1:1:1c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
66484	388.736416	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=555, hop limit=4 (no response found!)
66485	388.738722	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67360	389.744360	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=556, hop limit=5 (no response found!)
67361	389.757473	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67362	389.758200	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=557, hop limit=5 (no response found!)
67364	389.771157	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67365	389.771623	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=558, hop limit=5 (no response found!)
67366	389.784620	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67414	390.780163	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=559, hop limit=6 (no response found!)
67425	391.864677	2800:3f0:8647::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67426	391.865672	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=560, hop limit=6 (no response found!)
67427	391.220107	2800:3f0:8647::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
67428	391.221272	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=561, hop limit=6 (no response found!)
67429	391.363775	2800:3f0:8647::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68301	392.230241	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=562, hop limit=7 (no response found!)
68302	392.243254	2001:4860:0:1::471e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68303	392.243675	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=563, hop limit=7 (no response found!)
68305	392.256790	2001:4860:0:1::471e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68306	392.257169	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=564, hop limit=7 (no response found!)
68307	392.270198	2001:4860:0:1::471e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68329	393.346215	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=565, hop limit=8 (no response found!)
68330	393.359228	2001:4860:0:1::4d8b	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68331	393.359895	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=566, hop limit=8 (no response found!)
68333	393.373020	2001:4860:0:1::4d8b	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68334	393.374374	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=567, hop limit=8 (no response found!)
68335	393.388227	2001:4860:0:1::4d8b	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
68389	394.471440	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=568, hop limit=9 (reply in 68391)
68391	394.484443	2800:3f0:4005:408::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=568, hop limit=119 (request in 68389)
68392	394.485684	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=569, hop limit=9 (reply in 68397)
68397	394.502220	2800:3f0:4005:408::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=569, hop limit=119 (request in 68392)
68398	394.503499	2800:bf0:100:1150:c..	2800:3f0:4005:408::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=570, hop limit=9 (reply in 68399)
68399	394.516545	2800:3f0:4005:408::..	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=570, hop limit=119 (request in 68398)

Tracing route to www.google.com [2800:3f0:4005:401::2004]
over a maximum of 30 hops:

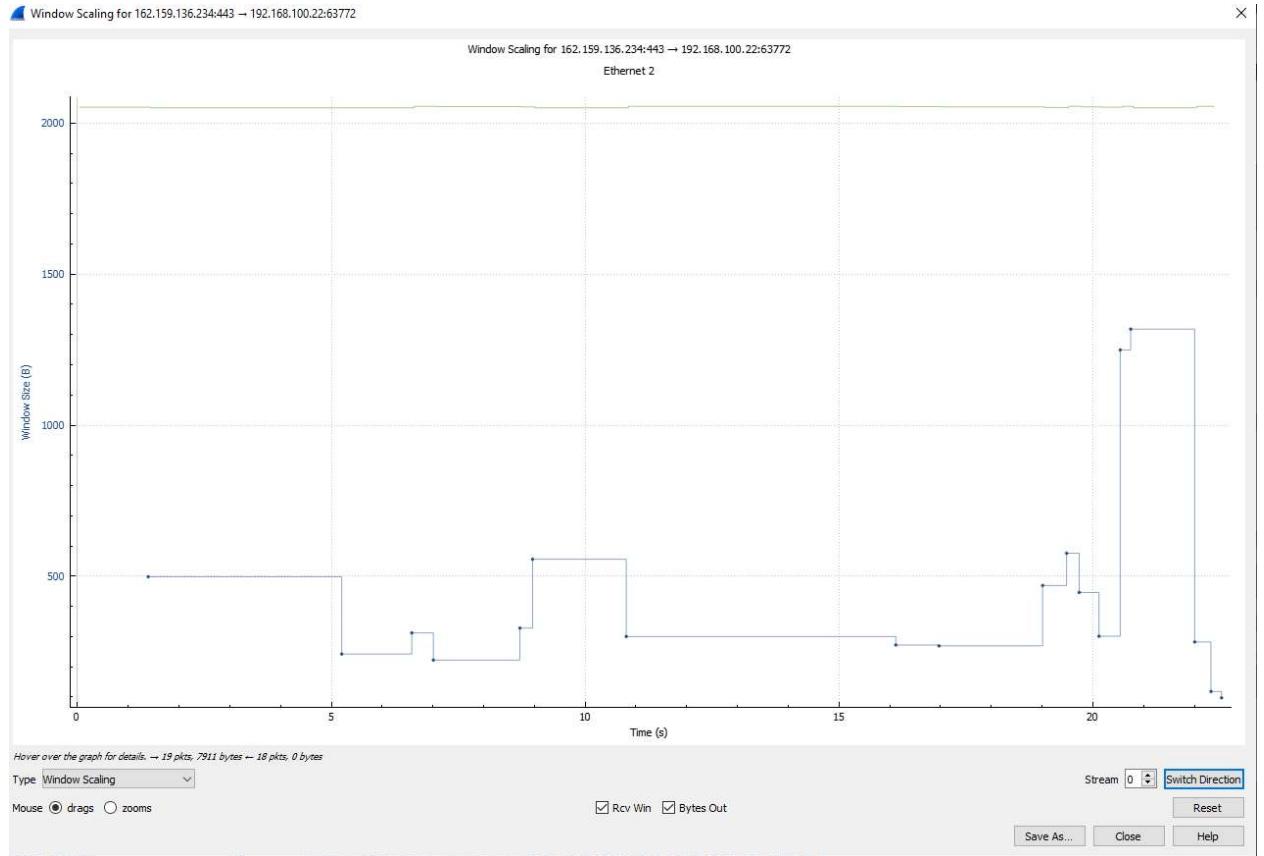
1	<1 ms	<1 ms	<1 ms	2800:bf0:1fff:f700:cebb:feff:fe1b:5f86
2	8 ms	3 ms	2 ms	2800:bf0:1fff:f700::1
3	1 ms	1 ms	1 ms	fd00:0:0:a51::1
4	3 ms	10 ms	2 ms	2800:2a0:21:10::15
5	13 ms	13 ms	12 ms	2800:2a0:21:10::16
6	14 ms	23 ms	14 ms	2800:3f0:8029::1
7	12 ms	12 ms	12 ms	2001:4860:0:1::389e
8	158 ms	357 ms	82 ms	2001:4860:0:1::11f3
9	14 ms	13 ms	13 ms	2800:3f0:4005:401::2004

Trace complete.

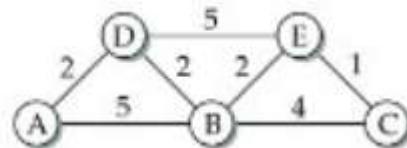
92422 479.256299	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=571, hop limit=1 (no response found!)
92423 479.256840	2800:bf0:1fff:f700::	2800:bf0:100:1150::c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92424 479.257287	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=572, hop limit=1 (no response found!)
92425 479.257675	2800:bf0:1fff:f700::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92426 479.257918	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=573, hop limit=1 (no response found!)
92427 479.258180	2800:bf0:1fff:f700::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92448 480.267217	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=574, hop limit=2 (no response found!)
92449 480.275774	2800:bf0:1fff:f700::	2800:bf0:100:1150::c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92450 480.276188	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=575, hop limit=2 (no response found!)
92451 480.279999	2800:bf0:1fff:f700::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92452 480.280313	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=576, hop limit=2 (no response found!)
92453 480.283020	2800:bf0:1fff:f700::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92459 481.285566	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=577, hop limit=3 (no response found!)
92460 481.287167	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92461 481.287608	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=578, hop limit=3 (no response found!)
92462 481.289077	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
92463 481.289488	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=579, hop limit=3 (no response found!)
92464 481.291021	fd00:0:0:a51::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93077 482.307387	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=580, hop limit=4 (no response found!)
93078 482.311083	2001:4860:1:1::dib	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93079 482.312403	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=581, hop limit=4 (no response found!)
93080 482.322390	2001:4860:1:1::1c18	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93081 482.324066	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=582, hop limit=4 (no response found!)
93082 482.326654	2800:2a0:21:10::15	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93094 483.330201	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=583, hop limit=5 (no response found!)
93095 483.343387	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93096 483.344269	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=584, hop limit=5 (no response found!)
93099 483.357305	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93100 483.358355	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=585, hop limit=5 (no response found!)
93102 483.371261	2800:2a0:21:10::16	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93132 484.363236	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=586, hop limit=6 (no response found!)
93133 484.378095	2800:3f0:8029::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93134 484.378355	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=587, hop limit=6 (no response found!)
93135 484.402165	2800:3f0:8029::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
93136 484.402816	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=588, hop limit=6 (no response found!)
93137 484.417182	2800:3f0:8029::1	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94149 488.359948	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=589, hop limit=7 (no response found!)
94150 488.372826	2001:4860:0:1::389e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94151 488.373222	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=590, hop limit=7 (no response found!)
94152 488.386079	2001:4860:0:1::389e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94153 488.386454	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=591, hop limit=7 (no response found!)
94155 488.399305	2001:4860:0:1::389e	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94684 489.479158	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=592, hop limit=8 (no response found!)
94687 489.637536	2001:4860:0:1::11f3	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94688 489.638089	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=593, hop limit=8 (no response found!)
94692 489.995582	2001:4860:0:1::11f3	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
94693 489.996165	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=594, hop limit=8 (no response found!)
94695 490.678256	2001:4860:0:1::11f3	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	174 Time Exceeded (hop limit exceeded in transit)
95242 491.092105	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=595, hop limit=9 (reply in 95243)
95243 491.106580	2800:3f0:4005:401::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=595, hop limit=119 (request in 95242)
95244 491.107075	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=596, hop limit=9 (reply in 95245)
95245 491.120069	2800:3f0:4005:401::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=596, hop limit=119 (request in 95244)
95246 491.120583	2800:bf0:100:1150::	2800:3f0:4005:401::2004	ICMPv6	126 Echo (ping) request id=0x0001, seq=597, hop limit=9 (reply in 95247)
95247 491.133599	2800:3f0:4005:401::	2800:bf0:100:1150:c92f:b22e:669d..	ICMPv6	126 Echo (ping) reply id=0x0001, seq=597, hop limit=119 (request in 95246)

b)

45 7.527527	192.168.100.22	192.168.100.1	TCP	66 49157 + 53 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
46 7.527893	192.168.100.1	192.168.100.22	TCP	66 53 + 49156 + 53 [SYN, ACK] Seq=1 Ack=1 Win=14600 Len=0 MSS=1460 SACK_PERM WS=4
47 7.527946	192.168.100.22	192.168.100.1	TCP	54 49156 + 53 [ACK] Seq=1 Ack=1 Win=2182272 Len=0
48 7.527985	192.168.100.22	192.168.100.1	TCP	56 49156 + 53 [PSH, ACK] Seq=1 Ack=1 Win=2182272 Len=2 [TCP segment of a reassembled PDU]
49 7.527998	192.168.100.22	192.168.100.1	DNS	87 Standard query 0xb59c A www.youtube.com
50 7.528157	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [SYN, ACK] Seq=0 Ack=1 Win=14600 Len=0 MSS=1460 SACK_PERM WS=4
51 7.528188	192.168.100.22	192.168.100.1	TCP	54 49157 + 53 [ACK] Seq=1 Ack=1 Win=2182272 Len=0
52 7.528214	192.168.100.22	192.168.100.1	TCP	56 49157 + 53 [PSH, ACK] Seq=1 Ack=1 Win=2182272 Len=2 [TCP segment of a reassembled PDU]
53 7.528226	192.168.100.22	192.168.100.1	DNS	87 Standard query 0xb8d0 HTTP www.youtube.com
54 7.528394	192.168.100.1	192.168.100.22	TCP	66 53 + 49156 + 53 [SYN, ACK] Seq=0 Ack=3 Win=14600 Len=0
55 7.528394	192.168.100.1	192.168.100.22	TCP	66 53 + 49156 + 53 [ACK] Seq=1 Ack=3 Win=14600 Len=0
56 7.528562	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [ACK] Seq=1 Ack=3 Win=14600 Len=0
57 7.530843	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [ACK] Seq=1 Ack=3 Win=14600 Len=0
58 7.532359	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [SYN, ACK] Seq=0 Ack=1 Win=14600 Len=0 MSS=1460 SACK_PERM WS=4
59 7.532413	192.168.100.22	192.168.100.1	TCP	54 49159 + 53 [ACK] Seq=1 Ack=1 Win=262656 Len=0
60 7.532475	192.168.100.22	192.168.100.1	TCP	56 49159 + 53 [PSH, ACK] Seq=1 Ack=1 Win=262656 Len=0
61 7.532496	192.168.100.22	192.168.100.1	DNS	87 Standard query 0xbac8 AAAA www.youtube.com
62 7.533281	192.168.100.1	192.168.100.22	TCP	66 53 + 49155 + 53 [ACK] Seq=1 Ack=3 Win=14600 Len=0
63 7.533591	192.168.100.1	192.168.100.22	TCP	66 53 + 49155 + 53 [ACK] Seq=1 Ack=3 Win=14600 Len=0
64 7.543141	192.168.100.1	192.168.100.22	DNS	418 Standard query response 0xbabc9 AAAA www.youtube.com CNAME youtube-ui.l.google.com HT
65 7.543287	192.168.100.22	192.168.100.1	TCP	54 49197 + 53 [FIN, ACK] Seq=36 Ack=357 Win=218216 Len=0
66 7.544818	192.168.100.1	192.168.100.22	DNS	286 Standard query response 0xb59c A www.youtube.com CNAME youtube-ui.l.google.com A 172.
67 7.544926	192.168.100.22	192.168.100.1	TCP	54 49198 + 53 [FIN, ACK] Seq=36 Ack=233 Win=218216 Len=0
68 7.545331	192.168.100.1	192.168.100.22	TCP	66 53 + 49158 + 53 [SYN, ACK] Seq=233 Ack=37 Win=14600 Len=0
69 7.545347	192.168.100.22	192.168.100.1	TCP	54 49198 + 53 [ACK] Seq=37 Ack=234 Win=210216 Len=0
70 7.547652	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [FIN, ACK] Seq=357 Ack=37 Win=14600 Len=0
71 7.547670	192.168.100.22	192.168.100.1	TCP	54 49197 + 53 [ACK] Seq=37 Ack=358 Win=210216 Len=0
72 7.550560	192.168.100.1	192.168.100.22	DNS	235 Standard query response 0xbabc9 AAAA www.youtube.com CNAME youtube-ui.l.google.com AAA
73 7.558768	192.168.100.22	192.168.100.1	TCP	54 49198 + 53 [FIN, ACK] Seq=38 Ack=182 Win=262400 Len=0
74 7.551136	192.168.100.1	192.168.100.22	TCP	66 53 + 49157 + 53 [FIN, ACK] Seq=182 Ack=37 Win=14600 Len=0
75 7.551152	192.168.100.22	192.168.100.1	TCP	54 49195 + 53 [ACK] Seq=37 Ack=183 Win=262400 Len=0
96 7.882928	192.168.100.22	192.168.100.14	TCP	164 64185 + 8080 [PSH, ACK] Seq=111 Ack=111 Win=1021 Len=110 [TCP segment of a reassembled PDU]
97 7.886849	2603:103:406::4:te	2800:bf0:100:1150:c92f:b22e:669d..	TCP	1486 443 + 63649 [ACK] Seq=1 Ack=1 Win=9563 Len=1412 [TCP segment of a reassembled PDU]
103 7.886904	2800:bf0:100:1150:c92f:b22e:669d..	2603:103:406::4:te	TCP	74 63849 + 443 [ACK] Seq=1 Ack=2212 Win=1028 Len=0
108 7.812988	192.168.100.14	192.168.100.22	TCP	164 80809 + 64165 [PSH, ACK] Seq=111 Ack=211 Win=312 Len=110 [TCP segment of a reassembled PDU]
142 7.851952	192.168.100.22	192.168.100.1	TCP	66 49195 + 53 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
143 7.852065	192.168.100.22	192.168.100.1	TCP	66 49195 + 53 [SYN, ACK] Seq=1 Ack=1 Win=262656 Len=0
144 7.852145	192.168.100.22	192.168.100.1	TCP	66 49196 + 53 [SYN, ACK] Seq=1 Ack=1 Win=14000 Len=0 MSS=1460 SACK_PERM WS=4
146 7.852914	192.168.100.1	192.168.100.22	TCP	66 53 + 49159 + 53 [ACK] Seq=1 Ack=1 Win=14000 Len=0 MSS=1460 SACK_PERM WS=4
147 7.852914	192.168.100.1	192.168.100.22	TCP	66 53 + 49108 + 53 [SYN, ACK] Seq=0 Ack=1 Win=14000 Len=0 MSS=1460 SACK_PERM WS=4
148 7.852968	192.168.100.22	192.168.100.1	TCP	54 49199 + 53 [ACK] Seq=1 Ack=1 Win=262656 Len=0
149 7.852975	192.168.100.22	192.168.100.1	TCP	54 49100 + 53 [SYN, ACK] Seq=1 Ack=1 Win=262656 Len=0



2) Use Dijkstra's to get the routing tables for nodes A, B and E



For A:

$$A = 0$$

$$D = 2 \text{ (A} \rightarrow \text{D)}$$

$$B = 4 \text{ (A} \rightarrow \text{D} \rightarrow \text{B)}$$

$$E = 6 \text{ (A} \rightarrow \text{D} \rightarrow \text{B} \rightarrow \text{E})$$

$$C = 7 \text{ (A} \rightarrow \text{D} \rightarrow \text{B} \rightarrow \text{E} \rightarrow \text{C})$$

For B:

$$B = 0$$

$$D = 2 \text{ (B} \rightarrow \text{D})$$

$$E = 2 \text{ (B} \rightarrow \text{E})$$

A = 4 (B -> D -> A)

C = 3 (B -> E -> C)

For E:

E = 0

C = 1 (E -> C)

B = 2 (E -> B)

D = 4 (E -> B -> D)

A = 6 (E -> B -> D -> A)

3) Suppose a host wants to establish the reliability of a link by sending packets and measuring the percentage that are received; routers, for example, do this. Explain the difficulty of doing this over a TCP connection.

TCP poses a challenge when performing this task since it's an extremely reliable connection. As such, there is no way to distinguish between a packet that was delayed and one that was retransmitted. TCP also guarantees that all packages are delivered so it would be hard to determine if the link can drop packages over other connection protocols.

4) Consider a simple congestion control algorithm that uses linear increase and multiplicative decrease (no slow start). Assume the congestion window size is in units of packets rather than bytes, and it is one packet initially.

a) Give a detailed sketch of this algorithm.

The algo works as follows:

Set congestion window size to 1 packet

While connection is open:

Send a packet

Wait for ACK

If ACK then increase congestion window size by 1

Else Decrease congestion window size by half

b) Assume the delay is latency only, and that when a group of packets is sent, only a single ACK is returned.

The algo works as follows:

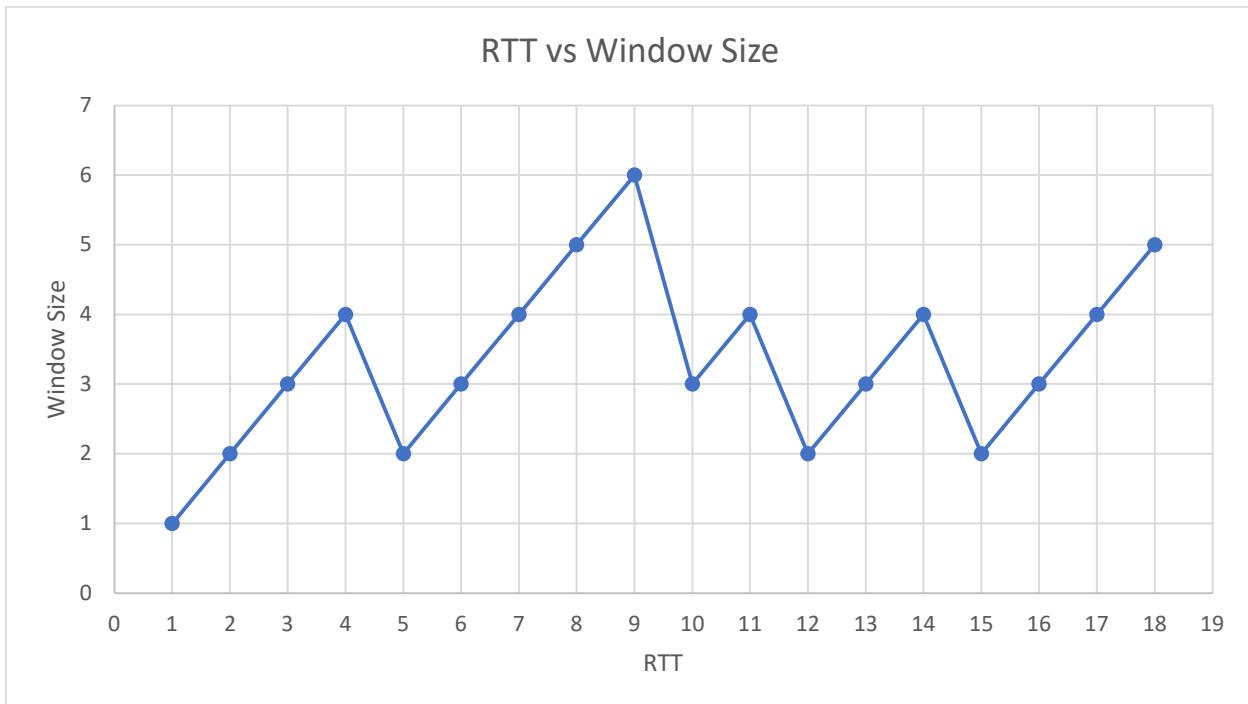
Set congestion window size to 1 packet

While connection is open:
 Send a group of packets
 Wait for ACK
 If ACK then increase congestion window size by 1
 Else Decrease congestion window size by half

So for example

Congestion window starts at 1
 A group of 1 packet is sent
 ACK is received and window size = 2
 A group of 2 packets is sent
 ACK is received and window size = 3
 A group of 5 packets is sent
 ACK is received and window size = 4
 ...

c) Plot the congestion window as a function of RTT for the situation in which the following packets are lost: 9, 25, 30, 38 and 50. For simplicity, assume a perfect timeout mechanism that detects a lost packet exactly 1 RTT after it is transmitted



RTT	packets		Window Size (Start of RTT)
1	1		1
2	2,3		2
3	4,5,6		3
4	7,8, 9 ,10	Packet 9 lost	4
5	9,10		2
6	11,12,13		3
7	14,15,16,17		4
8	19,20,21,22,23		5
9	24, 25 ,26,27,28,29	Packet 25 lost	6
10	25,26,27		3
11	28,29, 30 ,31	Packet 30 lost	4
12	30,31		2
13	32,33,34		3
14	35,36,37, 38	Packet 38 lost	4
15	38,39		2
16	40,41,42		3
17	43,44,45,46		4
18	47,48,49, 50 ,51	Packet 50 lost	5