tracert www.et.put.poznan.pl

```
C:\Users\local>tracert  www.et.put.poznan.pl

Tracing route to sphinx.et.put.poznan.pl [150.254.11.7]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms    <1 ms     1 ms  10.1.3.1
  4     1 ms     1 ms     1 ms  10.1.1.194
  5    10 ms    10 ms    12 ms  z-olsztyna.poznan-gw3.10Gb.rtr.pionier.gov.pl [212.191.224.41]
  6    29 ms    30 ms    32 ms  z-poznan-gw3.poznan.10Gb.rtr.pionier.gov.pl [212.191.224.18]
  7    29 ms    28 ms    26 ms  pp-piotrowo-gw.man.poznan.pl [150.254.163.27]
  8    29 ms    31 ms    28 ms  PUTNET-FW-V.put.poznan.pl [150.254.4.68]
  9    28 ms    29 ms    29 ms  PUTNET-X450A-A3-2.put.poznan.pl [150.254.6.58]
 10    26 ms    25 ms    27 ms  sphinx.et.put.poznan.pl [150.254.11.7]

Trace complete.
```

tracert - d

```
C:\Users\local>tracert -d www.et.put.poznan.pl

Tracing route to sphinx.et.put.poznan.pl [150.254.11.7]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms    <1 ms  10.1.3.1
  4     2 ms     1 ms     1 ms  10.1.1.194
  5    10 ms    11 ms    10 ms  212.191.224.41
  6    37 ms    37 ms    38 ms  212.191.224.18
  7    30 ms    27 ms    29 ms  150.254.163.27
  8    37 ms    44 ms    45 ms  150.254.4.68
  9    58 ms    54 ms    53 ms  150.254.6.58
 10    31 ms    31 ms    30 ms  150.254.11.7

Trace complete.
```

tracert - h

```
C:\Users\local>tracert -h 5 www.et.put.poznan.pl

Tracing route to sphinx.et.put.poznan.pl [150.254.11.7]
over a maximum of 5 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    63 ms     5 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     1 ms     2 ms     2 ms  10.1.1.194
  5    10 ms    10 ms    10 ms  z-olsztyna.poznan-gw3.10Gb.rtr.pionier.gov.pl [212.191.224.41]

Trace complete.
```

tracert - j

```
C:\Users\local>tracert -j  www.et.put.poznan.pl

Tracing route to sphinx.et.put.poznan.pl [150.254.11.7]
over a maximum of 30 hops:

  1      *        *        *         Request timed out.
  2      *        *        *         Request timed out.
  3      *        *        *         Request timed out.
  4      *        *        *         Request timed out.
  5      *        *        *         Request timed out.
  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.
```

tracert - w

```
C:\Users\local>tracert -w 100  www.et.put.poznan.pl

Tracing route to sphinx.et.put.poznan.pl [150.254.11.7]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     1 ms     1 ms     1 ms  10.1.1.194
  5    10 ms    10 ms    10 ms  z-olsztyna.poznan-gw3.10Gb.rtr.pionier.gov.pl [212.191.224.41]
  6    18 ms    18 ms    17 ms  z-poznan-gw3.pozman.10Gb.rtr.pionier.gov.pl [212.191.224.18]
  7    27 ms    28 ms    26 ms  pp-piotrowo-gw.man.poznan.pl [150.254.163.27]
  8    28 ms    28 ms    28 ms  PUTNET-FW-V.put.poznan.pl [150.254.4.68]
  9    27 ms     *       28 ms  PUTNET-X450A-A3-2.put.poznan.pl [150.254.6.58]
 10    29 ms    28 ms    28 ms  sphinx.et.put.poznan.pl [150.254.11.7]

Trace complete.
```

tracert www.wp.pl

```
C:\Users\local>tracert www.wp.pl

Tracing route to www.wp.pl [212.77.98.9]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     2 ms     2 ms     2 ms  10.1.1.194
  5     5 ms     4 ms     4 ms  153.19.102.137
  6     4 ms     4 ms     4 ms  wp-jro4.10ge.task.gda.pl [153.19.102.6]
  7     5 ms     4 ms     4 ms  rtr-int-1.rtr1.adm.wp-sa.pl [212.77.96.42]
  8     4 ms     4 ms     4 ms  www.wp.pl [212.77.98.9]

Trace complete.
```

tracert d

```
C:\Users\local>tracert -d www.wp.pl

Tracing route to www.wp.pl [212.77.98.9]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     1 ms     1 ms     2 ms  10.1.1.194
  5     4 ms     4 ms     4 ms  153.19.102.137
  6     4 ms     4 ms     4 ms  153.19.102.6
  7     5 ms     5 ms    31 ms  212.77.96.42
  8     4 ms     4 ms     4 ms  212.77.98.9

Trace complete.
```

tracert h

```
C:\Users\local>tracert -h 5 www.wp.pl

Tracing route to www.wp.pl [212.77.98.9]
over a maximum of 5 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     2 ms     1 ms     1 ms  10.1.1.194
  5     4 ms     4 ms     4 ms  153.19.102.137

Trace complete.
```

tracert j

```
C:\Users\local>tracert -j  www.wp.pl

Tracing route to www.wp.pl [212.77.98.9]
over a maximum of 30 hops:

  1      *        *        *        Request timed out.
  2      *        *        *        Request timed out.
  3      *        *        *        Request timed out.
  4      *        *        *        Request timed out.
  5      *        *        *        Request timed out.
  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.
```

tracert w

```
C:\Users\local>tracert -w 100 www.wp.pl

Tracing route to www.wp.pl [212.77.98.9]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.13.1
  2    <1 ms    <1 ms    <1 ms  213.184.8.1
  3     1 ms     1 ms     1 ms  10.1.3.1
  4     1 ms     1 ms     1 ms  10.1.1.194
  5    22 ms     4 ms     4 ms  153.19.102.137
  6     4 ms     4 ms     4 ms  wp-jro4.10ge.task.gda.pl [153.19.102.6]
  7     5 ms     5 ms     4 ms  rtr-int-1.rtr1.adm.wp-sa.pl [212.77.96.42]
  8     4 ms     4 ms     4 ms  www.wp.pl [212.77.98.9]

Trace complete.
```

b)Informacje o drodze pokonywanej przez pakiet w sieci przedstawiane są w formie listy nazw i adresów IP kolejnych węzłów sieciowych (routerów), przez które przepływa pakiet w drodze do celu. Każdy wiersz na liście reprezentuje kolejny węzeł sieciowy, a w kolumnach przedstawiane są informacje takie jak:numer skoku ,maksymalna liczba węzłów sieciowych, które mogą być przepuszczone przez pakiet, zanim zostanie on odrzucony, aby zapobiec zapętleniom w sieci,adres IP węzła sieciowego,czas odpowiedzi (czas, jaki upłynął od wysłania zapytania do otrzymania odpowiedzi) w milisekundach.

d)Najdłuższa znaleziona scieżka jest dla adresu tracert www.et.put.poznan.pl i wynosi 10 skoków.