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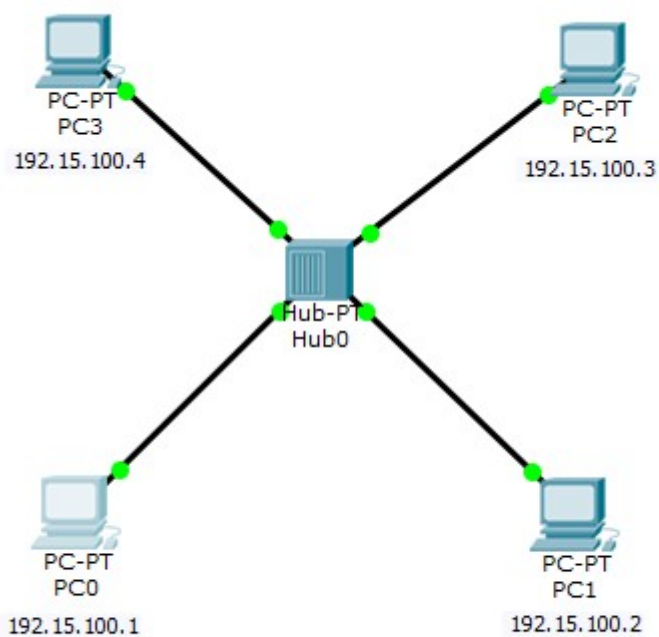
PRÁCTICA

La X que aparece en la dirección IP es el número que cada alumno tiene asignado para prácticas.

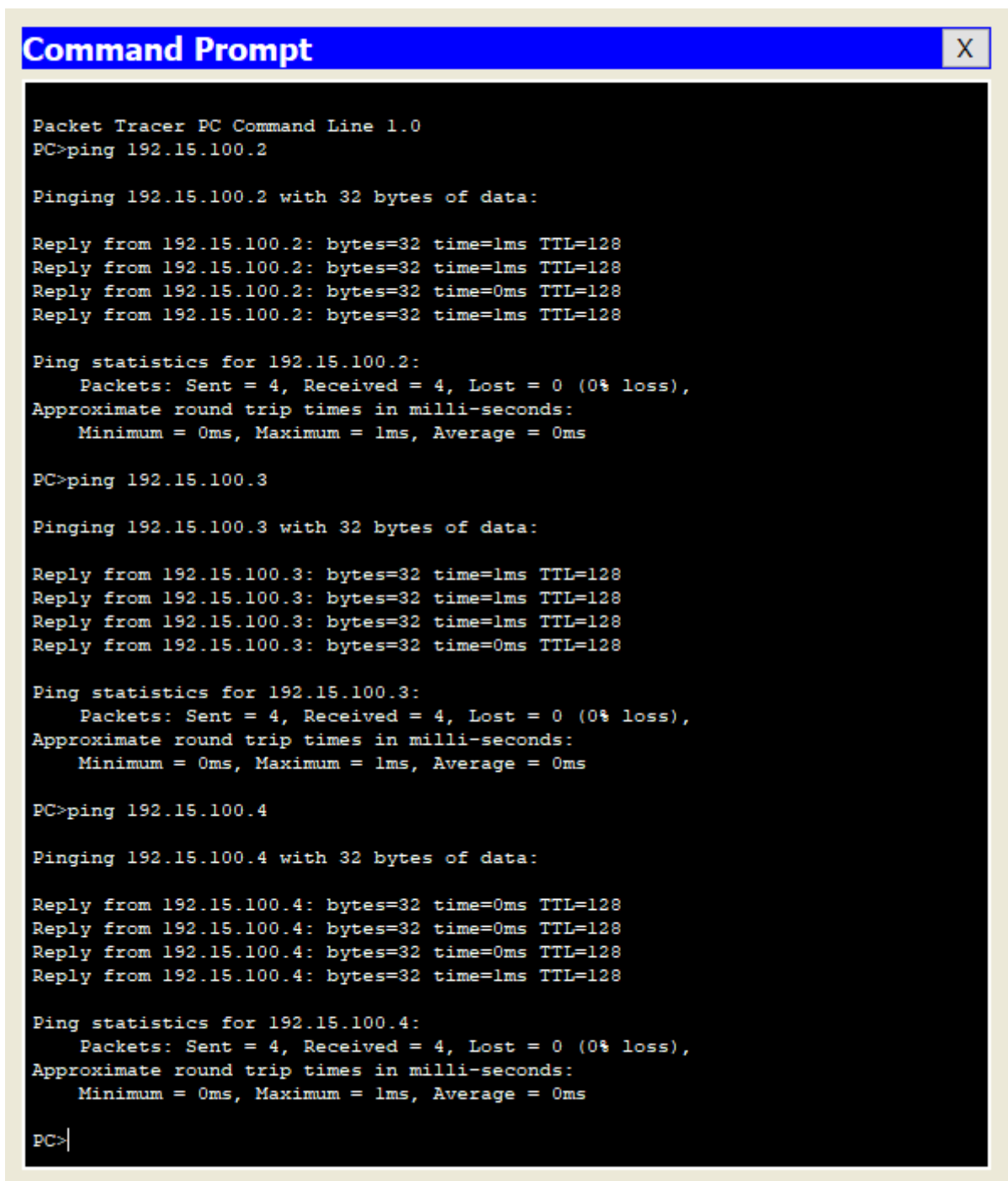
Crea una red con 4 ordenadores conectados con un hub.

A continuación deben seguirse los siguientes pasos:

- a) Toma la máscara 255.255.255.0 (clase C) y la dirección de red **192.X.100.0**. Después de asigna a las maquinas Ips en esa red con la máscara indicada.



Comprueba que todos pueden comunicarse entre sí utilizando el comando “ping”.



```
Command Prompt
X

Packet Tracer PC Command Line 1.0
PC>ping 192.15.100.2

Pinging 192.15.100.2 with 32 bytes of data:

Reply from 192.15.100.2: bytes=32 time=1ms TTL=128
Reply from 192.15.100.2: bytes=32 time=1ms TTL=128
Reply from 192.15.100.2: bytes=32 time=0ms TTL=128
Reply from 192.15.100.2: bytes=32 time=1ms TTL=128

Ping statistics for 192.15.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 192.15.100.3

Pinging 192.15.100.3 with 32 bytes of data:

Reply from 192.15.100.3: bytes=32 time=1ms TTL=128
Reply from 192.15.100.3: bytes=32 time=1ms TTL=128
Reply from 192.15.100.3: bytes=32 time=1ms TTL=128
Reply from 192.15.100.3: bytes=32 time=0ms TTL=128

Ping statistics for 192.15.100.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 192.15.100.4

Pinging 192.15.100.4 with 32 bytes of data:

Reply from 192.15.100.4: bytes=32 time=0ms TTL=128
Reply from 192.15.100.4: bytes=32 time=0ms TTL=128
Reply from 192.15.100.4: bytes=32 time=0ms TTL=128
Reply from 192.15.100.4: bytes=32 time=1ms TTL=128

Ping statistics for 192.15.100.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>|
```

- b) Seguidamente, modifica las máscaras de los PCs por 255.255.0.0 (clase B), ¿Pierdes la comunicación? ¿Por qué?

No se pierde la comunicación porque debido a las direcciones ip que tienen siguen dentro de la misma red

```
Command Prompt
PC>ping 192.15.100.2

Pinging 192.15.100.2 with 32 bytes of data:

Reply from 192.15.100.2: bytes=32 time=0ms TTL=128
Reply from 192.15.100.2: bytes=32 time=0ms TTL=128
Reply from 192.15.100.2: bytes=32 time=0ms TTL=128
Reply from 192.15.100.2: bytes=32 time=0ms TTL=128

Ping statistics for 192.15.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 192.15.100.3

Pinging 192.15.100.3 with 32 bytes of data:

Reply from 192.15.100.3: bytes=32 time=1ms TTL=128
Reply from 192.15.100.3: bytes=32 time=2ms TTL=128
Reply from 192.15.100.3: bytes=32 time=4294967295ms TTL=128
Reply from 192.15.100.3: bytes=32 time=1ms TTL=128

Ping statistics for 192.15.100.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4294967295ms, Average = 0ms

PC>ping 192.15.100.4

Pinging 192.15.100.4 with 32 bytes of data:

Reply from 192.15.100.4: bytes=32 time=1ms TTL=128
Reply from 192.15.100.4: bytes=32 time=1ms TTL=128
Reply from 192.15.100.4: bytes=32 time=1ms TTL=128
Reply from 192.15.100.4: bytes=32 time=1ms TTL=128

Ping statistics for 192.15.100.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms
```

- c) Mantén la máscara anterior pero las maquinas serán 0.0.2.2, 0.0.2.3, 0.0.1.1 y 0.0.12.23 ¿Se comunican? ¿Por qué?

Comunican igualmente como en el apartado anterior ya que aun cambiando la parte de máquinas siguen estando en la misma red

- d) Vuelve a la máscara 255.255.255.0 . ¿Se comunican? ¿Por qué?

Unicamente comunican los 2 primeros entre si al pertenecer a la misma red ya que la 192.15.1.1 es otra red la 192.15.1.0 y la 192.15.12.23 es otra red aparte, la 192.15.12.0

```
PC>ping 192.15.2.3

Pinging 192.15.2.3 with 32 bytes of data:

Reply from 192.15.2.3: bytes=32 time=1ms TTL=128
Reply from 192.15.2.3: bytes=32 time=0ms TTL=128
Reply from 192.15.2.3: bytes=32 time=1ms TTL=128
Reply from 192.15.2.3: bytes=32 time=1ms TTL=128

Ping statistics for 192.15.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 192.15.1.1

Pinging 192.15.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.15.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>ping 192.15.12.23

Pinging 192.15.12.23 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.15.12.23:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Debes entregar en el Moodle:

- un fichero **.pdf** la respuesta a los apartados **b**, **c** y **d**. El fichero debe tener al inicio de la 1ª pagina tu nombre completo.
- Un fichero **.pkt** (Packet Tracer en una versión anterior a la 7) donde se pueda ver y comprobar cómo has montado la red **del apartado d y su funcionamiento**.

Los nombres de los ficheros deben seguir la estructura indicada desde el inicio de curso:

nombrerepresentativo_1ºApellido2ºApellidoNombre