CSIS 330 – Lab 16: Packet Tracer

Verifying IPv4 and IPv6 Addressing Answer Template

**Addressing Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device** | **Interface** | **IPv4 Address** | **Subnet Mask** | **Default Gateway** |
| **IPv6 Address/Prefix** | |
| R1 | G0/0 | 10.10.1.97 | 255.255.255.224 | N/A |
| 2001:DB8:1:1::1/64 | | N/A |
| S0/0/1 | 10.10.1.6 | 255.255.255.252 | N/A |
| 2001:DB8:1:2::2/64 | | N/A |
| Link-local | FE80::1 | | N/A |
| R2 | S0/0/0 | 10.10.1.5 | 255.255.255.252 | N/A |
| 2001:DB8:1:2::1/64 | | N/A |
| S0/0/1 | 10.10.1.9 | 255.255.255.252 | N/A |
| 2001:DB8:1:3::1/64 | | N/A |
| Link-local | FE80::2 | | N/A |
| R3 | G0/0 | 10.10.1.17 | 255.255.255.240 | N/A |
| 2001:DB8:1:4::1/64 | | N/A |
| S0/0/1 | 10.10.1.10 | 255.255.255.252 | N/A |
| 2001:DB8:1:3::2/64 | | N/A |
| Link-local | FE80::3 | | N/A |
| PC1 | NIC | 10.10.1.100 | 255.255.255.224 | 10.10.1.97 |
| 2001:DB8:1:1::A | | FE80::1 |
| PC2 | NIC | 10.10.1.20 | 255.255.255.240 | 10.10.1.17 |
| 2001:DB8:1:4::A | | FE80::3 |

**Part 2:**     **Test Connectivity Using Ping**

**Step 1:**

a. Yes

b. Yes

**Step 2:**

a. Yes

b. Yes

**Part 3:**     **Discover the Path by Tracing the Route**

**Step 1:**

a.  (1) What addresses were encountered along the path?

10.10.1.97,

10.10.1.5,

10.10.1.10,

10.10.1.20

(2) With which interfaces are the four addresses associated?

R1,

R2,

R3,

PC2

b.     (1) What addresses were encountered along the path?

10.10.1.17,

10.10.1.9,

10.10.1.6,

10.10.1.100

(2) With which interfaces are the four addresses associated?

R3,

R2,

R1,

PC1

**Step 2:**

a.

(1) What addresses were encountered along the path?

2001:DB8:1:1::1,

2001:DB8:1:2::1,

2001:DB8:1:3::2,

2001:DB8:1:4::A

(2) With which interfaces are the four addresses associated?

R1,

R2,

R3,

PC2

b.

(1) What addresses were encountered along the path?

2001:DB8:1:4::1,

2001:DB8:1:3::1,

2001:DB8:1:2::2,

2001:DB8:1:1::A

(2) With which interfaces are the four addresses associated?

R3,

R2,

R1,

PC1