Route Trippin'

Background

As a network analyst, you are tasked with analyzing the routing table of a router to determine the next hop for various destination IP addresses. The router is connected to multiple networks and has several static routes configured.

Router Interface Configuration

- eth0: 192.168.1.1/24 (192.168.1.x)
- eth1: 10.0.0.1/8 (10.x.x.x)
- eth2: 172.16.0.1/16 (172.16.x.x)

Routing Table

Destination	Subnet Mask	Next-hop
0.0.0.0	0.0.0.0	10.0.0.2
10.0.0.0	255.0.0.0	On-link
172.16.0.0	255.255.0.0	On-link
172.17.0.0	255.255.0.0	172.16.0.2
192.168.1.0	255.255.255.0	On-link
192.168.2.0	255.255.255.0	10.0.0.2
192.168.3.0	255.255.255.0	172.16.0.2

Instructions

For each of the following destination IP addresses, determine the next hop based on the router's routing table. If the destination is directly connected, write "Direct". If there is no route to the destination, write "No Route".

1. 192.168.1.100
2. 10.0.0.5
3. 172.17.1.200
4. 192.168.2.50
5. 192.168.3.150
6. 172.16.0.1
7. 8.8.8.8
8. 192.168.4.100

To submit

Fill in the answers in a text file and submit it.