**Bash script that pings every IP in the 23.227.36.x subnet (where x is from 0 to 255) and displays whether each server is up or unreachable.**

#!/bin/bash

# Loop through all possible values of x (0-255)

for x in {0..255}; do

# Ping the IP address with a timeout of 1 second and send only 1 packet

if ping -c 1 -W 1 23.227.36.$x > /dev/null 2>&1

then

echo "Server 23.227.36.$x is up and running."

else

echo "Server 23.227.36.$x is unreachable."

fi

done

**Explanation:**

1. **for x in {0..255}**: Iterates over the range 0-255 to cover all possible IP addresses in the 23.227.36.x subnet.
2. **ping -c 1 -W 1 23.227.36.$x > /dev/null 2>&1**:
   * -c 1: Sends only one ping request.
   * -W 1: Sets a timeout of 1 second to avoid long delays.
   * > /dev/null 2>&1: Suppresses the output to keep the script clean.
3. **Conditional Check (if-else)**:
   * If the ping succeeds, it prints "Server 23.227.36.x is up and running."
   * If the ping fails, it prints "Server 23.227.36.x is unreachable."