

**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."
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