

# Task 0000

DNS server seems like not functioning properly. DNS server's job is to translate domain name to numerical IP adresss, but right now it's failing to do that.

Possible way to resolve it, is to check DNS server settings for any invalid DNS.

Or just restart the router

# Task 0001

An IP address conflict leads to loss of network connection or internet access to all devices it affects, as the router cannot pinpoint to which device it should send data. That might occur due to configuration errors and problems with DHCP server

# Task 0002

Two reasons may be that too many devices using the same channel and issues outside local network, might be with internet provider

# Task 0003

Possibly problem is with Wi-Fi drivers on the device, disabled adapter, incorrect security settings and other.

# Task 0004

A situation where YouTube loads but specific university website does not is mostly because DNS caching issues or firewall restrictions.

# Task 0005

The issue might be that the connection between the router and internet is not established or just blocked. Since address 8.8.8.8 fails, local device cant communicate with external network.

# Task 0006

Might be because there is an issue with specific network settings or software on one device, rather than global network failure.

Maybe corrupted DNS cache, firewall rules that block domainss but allow others.

# Task 0007

One of the reasons that a printer suddenly becomes unavailable to all computers and does not respond to ping command is hardware or software failure on printer itself.  
Other reason are problems at data link layer of network.



# Task 0008

Problem is absence or malfunction of router which performs functions of a default gateway and network address translation, or incorrect configuration of the default gateway IP address.

# Task 0009

Cause there is an issue specific to that single phone's software, hardware configuration or a problem with how router communicates with specific device, as rest of the network is working.

# Task 0010

Mac address: Data Link Layer

Port 443: Transport Layer

Wi-Fi signal: physical Layer

IPv4 Address: Network Layer

Ethernet frame: Data Link Layer

Router: Network Layer

TCP handshake: Transport Layer

Collision domain: Data Link Layer

ARP: Data Link Layer

Subnet Mask: Network Layer

Default gateway: Network Layer

Switch: Data link Layer