87 Computer Networking Interview Questions to Hire Top Engineers

Questions

1. Imagine computers are like friends. How do they 'talk' to each other on a network? Can you explain the basic process?

- 2. What's the difference between the internet and a local network at your home?
- 3. What is an IP address? Why do computers need them?

4. Pretend you're sending a letter. How is sending data over a network similar to mailing a letter?

5. What do you know about network cables and Wi-Fi? What are their advantages or disadvantages?

6. Can you name some devices that you find in a typical home network?

- 7. What is a server? What are the different types of servers you know of?
- 8. What's a network protocol? Can you name any?
- 9. Explain what a URL is and what all are its components.
- 10. Have you heard of a firewall? What do they do for computer security?
- 11. What is the difference between bandwidth and latency in networking?
- 12. In simple terms, what is cloud computing?
- 13. Explain the client-server model in computer networking.

14. What does it mean when we say a connection is 'secure', like when you see 'HTTPS' in a website address?

15. How do computers find each other on the internet? What's DNS?

16. If two computers on the same network have trouble communicating, what are some basic things you would check?

17. Explain the importance of having a strong password in network security.

18. What is the difference between TCP and UDP protocols?

- 19. Have you heard of a VPN? What is it used for?
- 20. How would you describe network topology? What types do you know?
- 21. What happens when you type a website address in your browser and press Enter?

22. Imagine computers are like friends sending letters. What's an IP address, and why is it important for the letters to arrive at the correct friend?

- 23. Explain what a 'network' is in simple terms.
- 24. What is Wi-Fi, and how does it let your computer connect to the internet without wires?

25. What does 'the cloud' mean when people talk about computers? Where are the files really?

26. What is a 'firewall', and why do computers need one?

- 27. What is a 'router', and what role does it play in a home network?
- 28. Can you explain the difference between the internet and an intranet?
- 29. What is the purpose of a 'DNS' server?
- 30. What is the role of a network cable, like an ethernet cable?

31. What are some ways to keep your computer safe on a network?

- 32. What does it mean when someone says a website is using 'HTTPS' instead of 'HTTP'?
- 33. Explain in very simple terms what a 'server' is.
- 34. What is bandwidth, and how does it affect your internet speed?
- 35. Have you ever troubleshooted a network problem at home? If so, what did you do?
- 36. If two computers are on the same network, how can they share files with each other?

37. What are the benefits of using a wired network connection versus a wireless connection?

- 38. What is the purpose of a 'VPN'?
- 39. What is MAC address?

40. What is the difference between TCP and UDP? Elaborate on which one is better and in what scenario?

41. Explain the difference between TCP and UDP, and when would you choose one over the other?

- 42. What is subnetting and why is it important for network management?
- 43. Describe the OSI model and the function of each layer.
- 44. What is the purpose of a firewall, and how does it protect a network?
- 45. Explain the concept of VPN and how it provides secure remote access.
- 46. What is the difference between symmetric and asymmetric encryption?
- 47. Describe the process of how a DNS server resolves a domain name to an IP address.
- 48. What is the purpose of DHCP, and how does it simplify network administration?
- 49. Explain the difference between IPv4 and IPv6.
- 50. What are the common routing protocols, and how do they differ?
- 51. Describe the function of a load balancer and its benefits.
- 52. What are VLANs, and how do they improve network performance and security?
- 53. Explain the concept of Quality of Service (QoS) and how it is implemented.
- 54. What is network address translation (NAT) and why is it used?
- 55. Describe the different types of network topologies and their advantages/disadvantages.
- 56. What are the common network troubleshooting tools and techniques you use?
- 57. Explain the concept of network segmentation and its security benefits.
- 58. What is the difference between a hub, a switch, and a router?
- 59. Describe the purpose of an access control list (ACL) and how it works.
- 60. What are the common wireless security protocols, and how do they differ?
- 61. Explain the concept of cloud networking and its benefits.

62. What is software-defined networking (SDN) and how does it differ from traditional networking?

63. Describe the role of network monitoring tools and their importance.

64. Describe a situation where implementing Network Address Translation (NAT) became a bottleneck, and how you resolved it.

65. How would you approach troubleshooting a complex network performance issue involving multiple network segments and devices?

66. Explain the benefits and drawbacks of implementing a Software Defined Networking (SDN) architecture in a large enterprise network.

67. Describe your experience with network automation tools and how they improved network efficiency.

68. How do you stay updated with the latest network security threats and vulnerabilities, and what steps do you take to mitigate them?

69. Explain the differences between various routing protocols such as BGP, OSPF, and EIGRP, and when each would be most appropriate.

70. Describe a time you had to design a network infrastructure for a new office location, considering factors like scalability, security, and redundancy.

71. How would you design a network to support real-time applications like video conferencing with minimal latency and jitter?

72. Explain your approach to network capacity planning and how you ensure the network can handle future growth and increased traffic.

73. Describe a situation where you had to implement a Quality of Service (QoS) policy to prioritize critical network traffic.

74. How do you approach network monitoring and alerting to proactively identify and resolve network issues?

75. Explain your experience with implementing and managing a virtualized network environment using technologies like VMware NSX or Cisco ACI.

76. How would you optimize a network for cloud connectivity, considering factors like bandwidth, latency, and security?

77. Describe your experience with implementing and managing wireless networks, including security considerations like WPA3 and rogue access point detection.

78. How do you ensure network compliance with industry regulations like HIPAA or PCI DSS?

79. Explain your experience with network forensics and incident response in the event of a security breach.

80. Describe a challenging network project you worked on and the lessons you learned from it.

81. How do you evaluate and select network hardware and software vendors based on technical requirements and budget constraints?

82. Explain your understanding of network segmentation and how it can improve security and performance.

83. How would you troubleshoot a network issue that is only affecting a specific application?

84. Describe your experience with implementing and managing a VPN infrastructure.

85. How do you approach documenting network configurations and procedures to ensure maintainability and knowledge transfer?

86. Explain your understanding of IPv6 and your experience with implementing it in a production network. What are some challenges and benefits?