
EE 477 PROJECT 3

1. Using Packer Tracer program, develop a network of two desktop computers with ethernet cards and one laptop computer with wireless connectivity to a home router with the following requirements:
 - a. Arrange all devices to receive IP addresses automatically via DHCP.
 - b. Show that all computers are in the same LAN and check their connectivity.
 - c. Change the settings on the home router interface to secure the wireless connection with appropriate settings to ensure encryption and password in addition to hiding SSID.
2. Check the IP settings of your computer and phone connected to your home network.
 - a. Show the output with the IP address and the physical address of each, gateway address, DNS server address, and subnet mask.
 - b. Check the connectivity between the two devices using an appropriate method.
 - c. Check the connectivity between your computer and the gateway.
 - d. Check the connectivity between your computer and the DNS server.
3. It is desired to check the connectivity between your computer and an external server to make sure that you have internet service. Please perform this check on your computer to reach an arbitrary server of your choosing and show the results.
4. Use an appropriate method to find out the symbolic domain name of the following IP addresses:
 - a. 37.216.222.5
 - b. 192.162.72.233
5. Use an appropriate method to find out the IP addresses of the following symbolic domain names:
 - a. www.google.com
 - b. lms.kau.edu.sa
6. A KAU student was trying to reach Blackboard server at lms.kau.edu.sa but connectivity seems to have a problem. How can you determine the location of the problem on either internal or external network connections? Use an appropriate method that can be used to do that to check the connection from your computer to the same server and print the results.