* My recommendation for this scenario is I would suggest the family to implement some combination of the two general plans they proposed. First, I would wire the two offices and playroom with Ethernet CAT 5e cable and put in a 1000Base-T switch. I would use the wired connection for the desktop computers and gaming console only. I want a wired connection for the desktop computers and gaming console because doing so will offer faster speeds and lower latency than if the computers were connected to the Wi-Fi wirelessly. The cost according to the lab instruction will come to $40 but I think it would cost more since you would need to hire people to do the proper cabling through the house. Then, I would also install a Wi-Fi AP for Wi-Fi throughout the house. This will allow all of the other devices in the house such as phones, laptops, printers, and more to have Wi-Fi connectivity. The cost for this according to the instructions comes to $85. Overall, this network design is very convenient for a home and fairly easy to setup and maintain. On the cost side, this may seem a little expensive because of the wired and wireless setup, but this will allow for the highest performance.