Case Study 12-1 1.

- 1. Why would someone want a smart home? What are the advantages of having everything connected? What is an example of something in your home that you would not want to see become a smart device? Why?
- A. The automation of chores like regulating temperature, turning on and off lights, opening and shutting window shades and altering water systems based on weather conditions is made possible by the central control of numerous household equipment made possible by smart home technology. This connectivity provides numerous benefits, including increased convenience, increased flexibility for incorporating new devices, increased home security, better management of household operations, improved energy efficiency, and enhanced appliance functionality. However, certain devices, such as home IP cameras, may not be ideal as smart devices due to their vulnerability to web-based hacking due to their web accessibility and interface.
- 2. What devices would you want to connect using Internet of Things in your home or apartment? How would having these devices connected change the way you live?
- A. Some of the automated things or connections I would like to have been as follows: Smart Lighting: You can schedule the on and off smart lights, control them remotely, and even program them to change color to suit your mood. This can improve the atmosphere in your home while also reducing energy consumption. • Smart Locks: Smart locks can be controlled by your smartphone and can provide access to those you authorize even when you're not at home. This can increase house security and offer comfort. • Smart Security: Cameras, door sensors, and motion detectors that can be watched remotely are all parts of smart security systems. This can assist you in monitoring your house while you're away and notify you of any unusual activity. • Smart Appliances: Smart appliances, such as refrigerators and washing machines, can offer energy usage data, send reminders when a repair is required, and even reorder supplies automatically. This can help one run your household more efficiently and save time. • Smart Thermostat: This can help save energy every day due to the use of motion sensors. Which results in the reduction of energy bills. By enhancing convenience, energy efficiency, security, and control over their homes, linked devices can transform how people live. One can, for example, remotely control your home environment, optimize your energy usage, monitor your home's security, and automate everyday tasks.

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- 3. Smart devices collect a lot of data about the use of the device and the habits of the user. What concerns do you have knowing that smart home devices are listening and learning your habits?
- B. People face numerous inconveniences as a result of smart devices. They do, in a sense, assist people, but they also have their limitations. I believe there is perpetual conflict among individuals because the Internet of Things requests consumers' private information. They suspect that there might be a breach in the information gathered. As some of the third-party vendors collect the data without one's knowledge, their privacy is violated. Data misuse is another frequent issue in this area. Users may feel as though they are being watched by someone when using cameras, and microphones occasionally record their conversations, which may be private. Algorithms containing bias and discrimination factors are also used to train Als. So, users should read the privacy policies of the companies that make their smart devices to make sure they know what information is being gathered and how it will be used. Users should also take precautions to secure their smart gadgets by updating them with the most recent security patches and changing the default passwords. Users can also reduce the quantity of data that smart gadgets gather by turning off pointless functions and restricting access to private data.