Chapter 1: Exercises for applications, services, classifications, and standards

Prof. Kejie Lu

- 1. List three activities that you do every day in which computer networks are used.
- 2. Identify three networks that can provide Internet connectivity in our classroom.
- 3. Find three companies that offer cloud services, and describe the services provided by each of them.
- 4. Find three peer-to-peer systems, and describe the services provided by each of them.
- 5. Find three companies that offer CDN services, and describe the main services provided by each of them.
- 6. Survey the following wireless networking technology and find the standard, most common frequency spectrum, channel bandwidth, maximal data rate, and typical communication range. Use a table to include all your findings.

Table 1: Survey of Some Standards for Wireless Networks

Network	Standard	Spectrum	Bandwidth	Max. Data rate	Range
Zigbee					
NFC					
Wi-Fi 5					
WiGig					

- 7. IETF is an organization that established a lot of standards for the Internet. In IETF website, find the RFC codes for the main version of the following standards.
 - (a) TCP (version 1981)
 - (b) IP version 4 (version 1981)
 - (c) FTP (version 1985)
 - (d) MPLS (version 2001)
 - (e) HTTP/1.1 (version 2014)