

CMSC 132 Quiz 5 Worksheet

The next quiz of the course will be on Mon, Aug 6. The following list provides more information about the quiz:

- The quiz will be a written quiz (no computer).
- Closed book, closed notes quiz.
- Answers must be neat and legible. We recommend that you use pencil and eraser.

The following exercises cover the material to be included in this quiz. Solutions to these exercises will not be provided, but you are welcome to discuss your solutions with TAs and instructors during office hours.

Networking

1. What is a port?
2. What is the IP address for the local machine?
3. What protocol does IPV6 replace?
4. What is a URL?
5. Identify the protocol, IP address, and port in the following IP address:
`http://www.noreal.com:8080/~main/90/index.html`
6. TCP is unreliable. True/False
7. UDP has low overhead. True/False.
8. Say you have two computers on the network (machines A and B). Machine A needs to send a short, 4-byte message to machine B, and doesn't expect to see any message in response. Discuss the merits of using TCP vs. UDP for this communication.
9. Which of the following applications can use UDP? Circle those that apply.
 - a. Video Streaming
 - b. Online banking
 - c. ftp client
10. What information do we need in addition to the IP address in order to connect to a server?
11. What is a DNS server? What is a DHCP server? What is NAT?
12. What is the difference between the Java Socket and ServerSocket classes?
13. What is the task performed by the accept method of the Java ServerSocket class?
14. Say a server has obtained a socket to communicate with a client (e.g., `clientRequestSocket = serverSocket.accept()`). What should the server do next in order to send and receive information from the client? You do not need to write code, just indicate what the server should do.