CS 212 -- Exam 2 -- Fall 09

Name:

1. What are the two parameters you must specify when creating a Socket obejct?

2. What is the parameter you must specify when creating a ServerSocket object?

3. What are the five request methods supported by HTTP?

4. Describe at least one HTTP request header that might be sent from a browser or other client.

5. Describe at least one HTTP response header that might be sent from a server along with the requested content.

6. Describe at least 3 HTTP status codes. If you cannot remember the exact numerical code, describe the conditions under which the code would be sent by a server.

7. What would the URL look like for the HTTP request described as follows:

        1. Domain: www.mydomain.com
        2. Port: 8080
        3. Path: /my/path
        4. Parameter: name=Bob

8. Name two methods of HttpServlet that a developer can override in a derived Servlet class.

9. Name one method commonly invoked on an HttpServletRequest object.

10. Name one method commonly invoked on an HttpServletResponse object.

11. Describe how a web application can maintain a session with a browser so that it can personalize a page for a given user (i.e., "Hello, Sami!").

12. Give the SQL statement that would retrieve from a table called "users" the entire row of data where the "name" column had the value "Bob".

13. Describe the design of a database table that stores email messages for multiple users of an email application. When a user receives a new email message, it will be stored in the table. When the user reads his/her email, the database will be queried. Your design should include the columns of the table, the type of data stored in each column, whether each column can be null, and which (if any) column holds the primary key. Hint: for full credit, think about the metadata your email client shows about each email message you receive.

14. Discuss one advantage of unit testing.

15. Discuss one possible reason that Java Server Pages would be limiting or not a good choice for a particular application.

16. Describe at least three unit tests for a method that takes as input an ArrayList of integers and returns the ArrayList in sorted order. For each test, give sample input and the expected result/behavior.