Homework 4

Instructions

Due on Monday, Nov. 30th, 2015, at class time (2:30PM)

You may submit this assignment electronically, via Blackboard, as a PDF, or you can submit a written version if you want to draw the trees out by hand. Please make your answers legible, if you do.

Questions

1. Ch. 11, problem 11.3a – Only do part a), you do not need to do b) or c).

2. Ch. 11, problem 11.4 – Please note that the steps are sequential. Your answer for d) should reflect a), b), and c). Also, only do this for the $n = 4$ tree, that you generated above.

3. Ch. 11, Problem 11.6

4. Ch. 11, problem 11.21

PHP and Web Pages

The assignment is to create two web sets of web pages and scripts. Please place your scripts in sql.cs.oberlin.edu /var/www/html/your_user_name. Include a README file in the directory, explaining what you did and any issues that you may have had with your implementation.

1. The first page will display a question to the user, asking whether they are interested in ratings from Males or Females, and for which year. Use /var/www/html/311-demo/dbForm.html as a sample form. You can use the AJAX implementation of the year popup menu in dbForm.html if you want, but it is not required. The gender should be either a popup menu or a radio button, you may choose. There should be a "Submit" button, which when clicked, will send the web form to the server, which will process and return the results of the query on the database.

/var/www/html/311-demo/dbDemo.php contains a sample PHP script that you can modify. Please use your own username and password. You may use my database ("rjhtest") if you prefer, but you may also use the one that you created for HW 3. This script should return the results of your query in a tabular form. You may use an HTML Table or div blocks, if you prefer, but you should not return a raw dump of text.

2. The second page will allow the user to change the ratings for movies that they have previously rated. Pick a userID from the database that has rated more than 10 movies, and present a list of movies that they have rated with the values. Present the ratings as either a popup menu or as a set of radio buttons. The submit button should send the values to the server to be inserted into the database. You will need to update the entry in the database with an UPDATE statement, not delete and insert.

The form handler in the back end should perform input validation. Make sure that the movies are movies that have been rated previously. Make sure that the userID is a valid userID in the system. Return a web page that summarizes the changes. If a movie rating has not been changed, it should not be shown in the output.

Do not worry about authentication. We are assuming that it is working.

Honor Code

Please affix the required "I have adhered to the Honor Code in this assignment." at the bottom of your submission.