Reminders

a) The programming language used to write the code doesn't matter. But the performance will be considered as the main criteria.

b) These assignments are a bit harder than the previous ones, But strongly recommended for those who are interested in the web development market. Patience is the key to solve each problem of this section.

Homework Assignment #3

1. Submit comments
Assume that the schema of a table is given as below.
    comments(id, username, message, tstamp)

such that 'tstamp' corresponds to the time stamp of the moment when someone submits a comment. So, The default value for this field is CURRENT_TIMESTAMP.

Design a webpage which receives a username and a text (the comment), submits the input to the database server, and prints a message like: 'Successfully submitted.' (35 points)

2. Generalizing the INSERT statement
Write a function which takes an associative array containing a key and a value, also a variable for the name of a table and another associative array which holds the information used to connect to the database server, as the input, and adds a new row to the database's table. (35 points)

    Example:
    Assume that the schema of the table is like the one written below.
    Users(id, name, age, country)

Input:

Input_data: ['name'=>'ali', 'age'=>20, 'country'=>'iran']

Table_name: 'Users'

Connection: ['host'=>'localhost', 'user'=>'root', 'password'=>'root', 'database'=>'mydb']

Output: One row will be added to the table 'Users' of the database 'mydb', which corresponds to the fields of 'input_data'.

3. Showing the online users of a website

Provide a method for determining which registered users of a website are online at a specific time. (30 points)

## Special Assignment #3

1- Describe 'Rainbow Attack' and provide a method to prevent it from happening. (20 points)
2- Similar to the second exercise of the upper section, Write a function for generalizing the SELECT statement. (30 points)
3- Design a webpage which submits some information to the database server, without refreshing the page or anyway which involves changing the URL.
(50 points)
Hint: The AJAX Technology is needed.