- 1. Create a class "Employee" which has two public attributes "id" and "name". Write a constructor method for this class which takes two arguments to initialize "id" and "name" attributes. Write another method for this class which returns the last name of employee by splitting the "name" attribute using the whitespace character (Note that name stores first name and last name of employee separated by a space).
- 2. Create a class "Teacher" which inherits "Employee" and has one public attribute "department". Write a constructor method for this class that takes three arguments to initialize "id" and "name" attributes from the base class and "department" attribute from this class.
- 3. Write a function "unique\_departments" that receives an array of teachers as its argument and returns all the unique departments associated with teachers. For example, if you have 4 teachers in Computer Science department and 3 teachers in Fashion Design department, this function should return ["Computer Science", "Fashion Design"].

NOTE: The first three questions must be answered in one PHP script file. Don't separate them into different files.

4. Create a connection to the MySQL server using MySQLi. Assume that you have a database "foo" with a single table "Tests". Columns for "Tests" table are "test\_number", "patient\_name", and "blood\_pressure". Now, create a class "Test" which has three public attributes "number", "name", and "pressure". Finally, write a PHP function that receives the MySQLi connection to this database and an object of type "Test" and adds a row to the database using the information provided by the second argument.