Basic

* 1. Create database structure for accounting firm. Keep in mind that accounting firm has to keep records of their clients, clients incoming and outgoing invoices, costs and has to keep receipts for at least 5 years. Most frequent query is by client name and yearly income and second one is getting most profitable client  
     Please see folder – AccountingFirmDB for create and select test scripts. Files are in sql file format.
  2. How would you find all files  that  ends with “.js”  and bundle them together into one file.

Bash command:

find . -type f -name '\*.js' -exec cat {} + >> main.js

* 1. You are a forensic computer scientist, and you have to write a program that finds the right person responsible for a murder. the detective sent you an DNK sample of a murderer and list of 3 suspect. Data sent to you:
     1. **DNK**: HHHKLJ140L98IHYYYN **(CODE: HAIR, EYES, RACE)**
     2. **Note zame: Preverjaš, če vsebuje vse tri atribute, potem je to ta oseba! Uporabi objekte!**
     3. **Suspects**:
        1. John Novak
           1. Hair:  Black
           2. Eyes: Green
           3. Race: Asian
        2. Vin Diesel:
           1. Hair: Blonde
           2. Eyes: Brown
           3. Race: Caucasian
        3. Guy Fawkes:
           1. Hair: Black
           2. Eyes: Brown
           3. Race: Hispanic
     4. **Legend**
        1. Eyes:
  2. Black:  140L98
  3. Green: 140A98
  4. Brown: 140A88
  5. Blue:    140L97

1. Hair:
   1. Brown: HHHKLJ
   2. Black:   HHHKLI
   3. Blonde: HHLH1L
   4. White:  HHLH2L
2. Race:
   1. Asian: 1HYYYN
   2. Hispanic: IHYYYN
   3. White: IHYYNN

Solution is in folder ForensicComputer. This is Command Prompt/Bash application. Run it command line »php ForensicComputer.php«. Solution is neither of listed persons. I have creted Perfect Suspect person, which matches case.

Practical:

Data: [https://admin.b2b-carmarket.com//test/project](https://admin.b2b-carmarket.com/test/project)

1. Write a parser for provided data, so you get a valid associative array of all the rows
2. Create appropriate database table and write all the rows into it, be careful there could be a lot of rows
3. Generate fake Names and Surnames for all of the Buyers in separated table, one for each buyer.
4. Write php script that prints all of the rows in paginated table
5. Use jQuery to make pagination async, make sure that URL still changes.
6. Write simple search functionality, that searched based on Name,Surname and SaleDate

**Hint**:<https://datatables.net/>, if you decide to use Datatables, make sure that all searching and paging is done in PHP not in JS!  
  
Solution is in folder »Practical«. Solution is in two php files FileParser.php and DataGrid.php. First is command line tool, run by »php FileParser.php«

Second is web page using DataTables.Net jQuery component. I have just filled data into table, using PHP from MySQL. Please also find sql file (DataFileTableAndDB.sql) that is Create table for »datafile« table. Also, you can find test sql commands »TestData.sql«

For pasing data, there are three CSV files:

* Project.html
* Names.csv and Surname.csv (generated from <http://listofrandomnames.com/>)

For mock up DataTables.Net jQuery component, there is folder named »DataTableTest«