# LAB: MySQL and PHP Advanced

This document defines the **lab assignments** for the ["PHP WEB @ Software University.](https://softuni.bg/courses/php-basics/)

# Part I - Transaction in SQL

**All tasks with SQL Scripts must be sent as text files with .sql extension**

## Prepare Database

* Create new database with name “php-course”
* Create table with name “students”
  + Table must contains data for:
    - Student ID
    - Student First Name
    - Student Last Name
    - Student number
* Create table with name “courses”
  + Table must contains data for:
    - Course ID
    - Course Name
* Create table with name “student\_subscriptions”
  + Table must contains data for:
    - Course ID
    - Student ID
  + Populate table with 2 rows of sample data
* Make necessary relations and indexes

## Populate tables via PHP file

* Create php file that get student data from standard input. The script must receive data until get the “edn” keyword. Other lines will be in this format
  + **<First\_name> <Last\_name> <Studen\_number> <CourseName>**
* If student number exists - the script must throw Exception, print message on screen and **continue receiving data**
* If student number did not exists - student data must be writen in database
* if course name exists - current student must be subscribed to it
* if course name did not exists - the script must throw Exception, print message on screen and **continue receiving data. No any data for current student should not recorded into database**

## Create procedure

* Prepare SQL for creating procedure
  + Procedure must return data for all students
  + result must include
    - First and last name into one column
    - Student number
    - Course **NAME**

## Call procedure

* Call procedure from problem 3 in PHP file and print data

## Create trigger

Create SQL trigger on table students

Trigger must execute on insert and validate student number. The number must be at least 5 digits

## Create trigger II \*

* Add new column “subscribers” into table “courses“
  + It must contains number of subscribed students in current course
* Create necessary SQL triggers on table “student\_subscriptions” so that new column “subscribers” always show exact number of students in current course when new subscription is added

Тhe solution to the task must contains SQL definition of triggers