# Homework: Database Performance

This document defines the homework assignments from the ["Databases" Course @ Software University](https://softuni.bg/trainings/20/Databases-Feb-2015). Please submit as homework a single zip / rar / 7z archive holding the solutions (source code) of all below described problems.

## Create a table in SQL Server

Your task is to create a table in SQL Server with 10 000 000 entries (date + text). Search in the table by date range. Check the speed (without caching).

You should submit a SQL file with queries and screenshot of speed comparison as a part of your homework.

## Add an index to speed-up the search by date

Your task is to add an index to speed-up the search by date. Test the search speed (after cleaning the cache).

You should submit a SQL file with queries and screenshot of speed comparison as a part of your homework.

## Create the same table in MySQL

Your task is to create the same table in MySQL and partition it by date (1990, 2000 and 2010). Fill 1 000 000 log entries. Compare the searching speed in all partitions (random dates) to certain partition (e.g. year 1995).

You should submit a SQL file with queries and screenshot of speed comparison as a part of your homework.