Computer Science and Mathematics
Summer term 2019

Exercises 7

1. Databases, SQL:

(a) Change the query from the library example in the script so that in addition to the overdue book, the result also contains the name of the person who has borrowed the book.

(b) Write a query which determines all books which have to be given back in the next two weeks.

(Assume that from addition of a date and a number, a date results which lies the given number of days after the given date.)

2. Write Java expressions for the following mathematical expressions:

(a) $\dfrac{a}{b+\dfrac{1}{c}} + 2.5 \cdot 10^6$

(b) $e^{2k} \cdot \sqrt{x^2 - 2xy + 1}$

(c) $z = \begin{cases} 1 & \text{if } n \text{ is even} \\ 0 & \text{otherwise} \end{cases}$

(Remark: $\sqrt{x}$ is **Math.sqrt(x)**, e^x is **Math.exp(x)**,
a % b gives the rest when dividing **a** by **b**.)