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**Übungen zur Vorlesung**
**Einführung in das Programmieren für TM**

**Serie 1**

This exercise sheet will be discussed during the first exercise class.

**Aufgabe 1.1.** Create a subdirectory `serie01` in your home directory at the `lva.student.tuwien.ac.at` server. Copy the source codes of the following exercises into this directory. In the future the exercises must be done at home and will be discussed during the exercise class. You have to ensure that you have copied the source code of your solved exercises to the server before the exercise class starts. If necessary, ask your tutor how to copy files from your desktop PC or laptop to the server. Have a look at the usage of the `scp` command.

**Aufgabe 1.2.** Write a program that reads in the length $a \in \mathbb{R}$ and the width $b \in \mathbb{R}$ of a rectangle. The program should compute the area of the rectangle. The result should be printed on the monitor. Save your source code as `rectangle.c` into the directory `serie01`.

**Aufgabe 1.3.** You win $x \in \mathbb{R}(x > 0)$ € in a game. You want to share this money with your $n \in \mathbb{N}$ friends in a fair way. How much money $y \in \mathbb{R}$ do you and each of your friends get? Write a program that reads in $x \in \mathbb{R}$, $n \in \mathbb{N}$ and prints out $y \in \mathbb{R}$. Save your source code as `prize.c` into the directory `serie01`.

**Aufgabe 1.4.** What is a variable? What is a data-type? What is the difference between initialization and declaration of a variable? Why do we have different data-types for the representation of numbers? Discuss in the group.