


# Exercise Sheet 1 for Algorithmen und Datenstrukturen (Sommer 2026)

*Hand In: Until 2026-05-1 18:00, on ILIAS.*

## Problem 1 (Magic Square)


40 points

Solve [marburg.kilonova.ro/problems/4](https://marburg.kilonova.ro/problems/4) (Magic Square) .

**Hint:** The examples on Kilonova follow a pattern. Try diagonal, otherwise up, modulo boundaries.

## Problem 2 (Lockers)

40 points

Solve [marburg.kilonova.ro/problems/5](https://marburg.kilonova.ro/problems/5) (Lockers) .

Give a proof of correctness in a written answer to your tutors.

**Hint:** It may be insightful to look at the actual lockers that remain open on an example.