

Homework Assignment #8

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Assignment Description

Download the dataset from the website on Estonian statistics into **R Markdown** session. The number of admitted students across different specialties is recorded for Year 2021. The numbers of admitted students are presented for *Study programme group*, *Level of study*, and *Mother tongue*.

To download the dataset, use the following R code:

1. Perform quick EDA and pick up variables you want to explore in more depth.
2. Prepare the data set that includes only variables of your interest in a suitable format for analysis (use `dplyr` package and `tidyr` when necessary).
3. Based on the dataset, formulate your *Research Question(s)*. Think of questions that you can answer with the help of either *chi-square* statistical test or some type of *t-test*.
4. Hypothesis testing.
 - 4.1 State the null hypothesis and the alternative hypothesis.
 - 4.2 Report on collected data and sample size.
 - 4.3 Check the assumption of the chosen statistical test. Perform the required statistical test.
 - 4.4 Decide whether to reject or fail to reject your null hypothesis, report selected significance level.
 - 4.5 Interpret and report the results.
5. Create a report in **R Markdown** with clear sections, using headings and subheadings.