

Session 1 homework task

The following table displays the scores of students in two foreign language exams, one administered at the beginning of term, the other at the end of term.

Create a data frame called `language_exams` with the information provided in the table, then answer the questions below using R.

Student ID	Exam 1	Exam 2
Elin	93	98
Spencer	89	96
Crystal	75	94
Arun	52	65
Lina	34	50
Maximilian	50	68
Leyton	46	58
Alexandra	62	77
Valentina	84	95
Lola	68	86
Garfield	74	89
Lucy	51	70
Shania	84	90
Arnold	34	50
Julie	57	67
Michaela	25	37
Nicholas	72	90

Questions:

1. What are the mean scores for exam 1 and exam 2?
2. What is the difference between the two means?
3. What are the mean scores for the two exams if you remove extreme values (the top and bottom 20%) from each?
4. Based on the previous step (with outliers removed): What is the difference between the two means now? Please round the value before reporting the result.
5. Can you do steps 3 and 4 in a single command?