# Problem repo

To make sure the problems are correct and the problem repo works correctly, please adhere to these rules.

Rules:

* The header should contain every variable used in both pre- and postconditions as a parameter. (including quantifier indices)
* The header should contain a return type, although it does not matter what.
* The description should explain all variables used in both pre- and postconditions.
* The return value of the method should be distinct from the input variables.
* The pre- and postconditions should be as strict as possible, even if it is literally the calculation the method should do.
* Expressions like “a == b + c” are interpreted by the back end as “(a == b) + c”, not “a == (b + c)”.
* Brackets around a single variable are interpreted as casting and is not supported by the back end.
* Problems containing arrays are at least difficulty 3. Problems containing quantifiers are at least difficulty 4.

# Filling the problem repo

The problem repo can be filled with the repo problems spreadsheet as follows:

* Export the spreadsheet to a Tab-separated values (.tsv) format
* Save the file as “repoProblems.tsv” in the GameServer folder
* On the server, in the GameServer folder run the command “ant AddRepoProblems”

This updates the problem repo with the problems in the “repoProblems.tsv” file. Duplicate problems, where both the header and description are equivalent, and problems where the teacher solution has incorrect syntax are not added to the database.