## Columns of the file students.csv

Careful with missing values!!!

***grp***: the group

***userid***: the identifier of the student

***take\_exam***: 0 if exam is -1 (did not take the exam)

***treatments\_16***: the visualization version (1,2,3)

***gender***: 0: female, 1: male

***pretest***: form 0 to 1, the level of knowledge at the beginning of the term

***posttest***: form 0 to 1, the level of knowledge at the end of the term

***exam***: -1 means not taken. Score ranges from 0 to 100.

***programme***: the program i which the student is register

***lgain***: learning gain

***pretest\_binned***: 1: low pretest, 2: high pretest, as separate by median

***SC***: social comparison orientation as measured by a questionnaire. Value ranges 0-1

The next columns represent the scores from 0 to 1 of a series of motivational factors measured with 3 questionnaires.

***F\_m***: fascination

***CB\_m***: competency beliefs

***V\_m***: values

***MAp\_m***: mastery approach orientation

***MAv\_m***: mastery avoidance orientation

***PAp\_m***: performance approach orientation

***PAv\_m***: performance avoidance orientation

***Mind\_m***: mindset (ranges from -1 to 1)

***MindDom\_m***: mindset about programming skill (ranges from -1 to 1)