

WRITING S3 CLASSES EXERCISE

1. Create an S3 class constructor function that instantiates (that is, creates) objects of the new S3 class 'student'. The **student()** constructor function accepts at least three arguments: gender, age, and GPA, and creates a student object with the specified values for these characteristics.
2. Create a generic print method, **print.student()**, for individual student objects (as an argument) that prints (to the screen) the values of the student's characteristics and other attributes, each appropriately labeled.

WRITING S4 CLASSES EXERCISE

1. Write R code to create a new S4 class 'teacher'. A teacher object should have at least three slots: name (character), salary (numeric), and phd (logical). The value of the phd slot is either TRUE or FALSE, depending on whether the S4 teacher object is doctorally-qualified or not (that is, does s/he possess a terminal degree, a PhD? Or not?) Create two or three S4 teacher objects and mix up their names, salaries, and terminal degree qualifications.
2. Implement a generic show method for the specific S4 teacher class objects that "pretty prints" the teacher's name, his/her salary, and whether that teacher is doctorally qualified or not, for example: "Geoff is paid a salary of 24,000 and Geoff is not doctorally-qualified."