

CS Homework #19

Deadline: March 6th, 9:00 pm.

- *Save your code as `lastname_homework19.py` and submit on Google Classroom.*
- *Please, run your code before submitting.*
- *If you get an error, try to fix it before submitting your homework.*
- *If you get help from anyone, please, make sure that you actually understand the solution.*

Task 1

Create a class `Student`. Each student (instance) must have the following attributes: a name, an age, and a grade. These values are the arguments passed by the user.

Task 2

Add one more instance attribute `'school'`, which is a string value as follows: If the student is in grade 5 or lower, the attribute should be equal to `"elementary school"`. If the value is between 6 and 8, the value is `"middle school"`. Finally, if the grade is 9+, the value should be `"high school"`. Notice that the `'school'` attribute must be determined on the basis of the `'grade'` attribute. (In other words, the `'attribute'` is NOT directly passed by the user; instead it is determined once we know the grade; hint use if statements).

Task 3

Add an instance method, which displays the basic information about the student (name, age, grade, and school).

Task 4

Create an instance method, which updates the `'school'` attribute on the basis of the `'grade'` (in case the grade `'attribute'` was changed).

Task 5

Let's test our code. Create a student instance, who is 6 years old and in the first grade. Run the `'display information'` method from Task 3 to verify that the student was successfully created.

Task 6

Create a for loop, which increases the students' grade (one at a time). During each step, run the update school method from Task 4 and display the basic information about the student from Task 3.