

CS 101 Homework 2-13-2022

- *Save your code as lastname_homework.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 must have the following attributes: name, age, and grade. These values are the arguments passed by the user.

Task 2

Add one more attribute: school. It should be 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

Create a method, which displays the basic information about the student (name, age, grade, and school).

Task 4

Create a 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.