

# EX016 – Pretend Assignment

## Derive an Instructor Class from the SimplePerson class

### Due Date:

11:59 PM the day after this assignment is presented in class  
Anything after that receives a zero (no partial credit for late submissions)

### Grading:

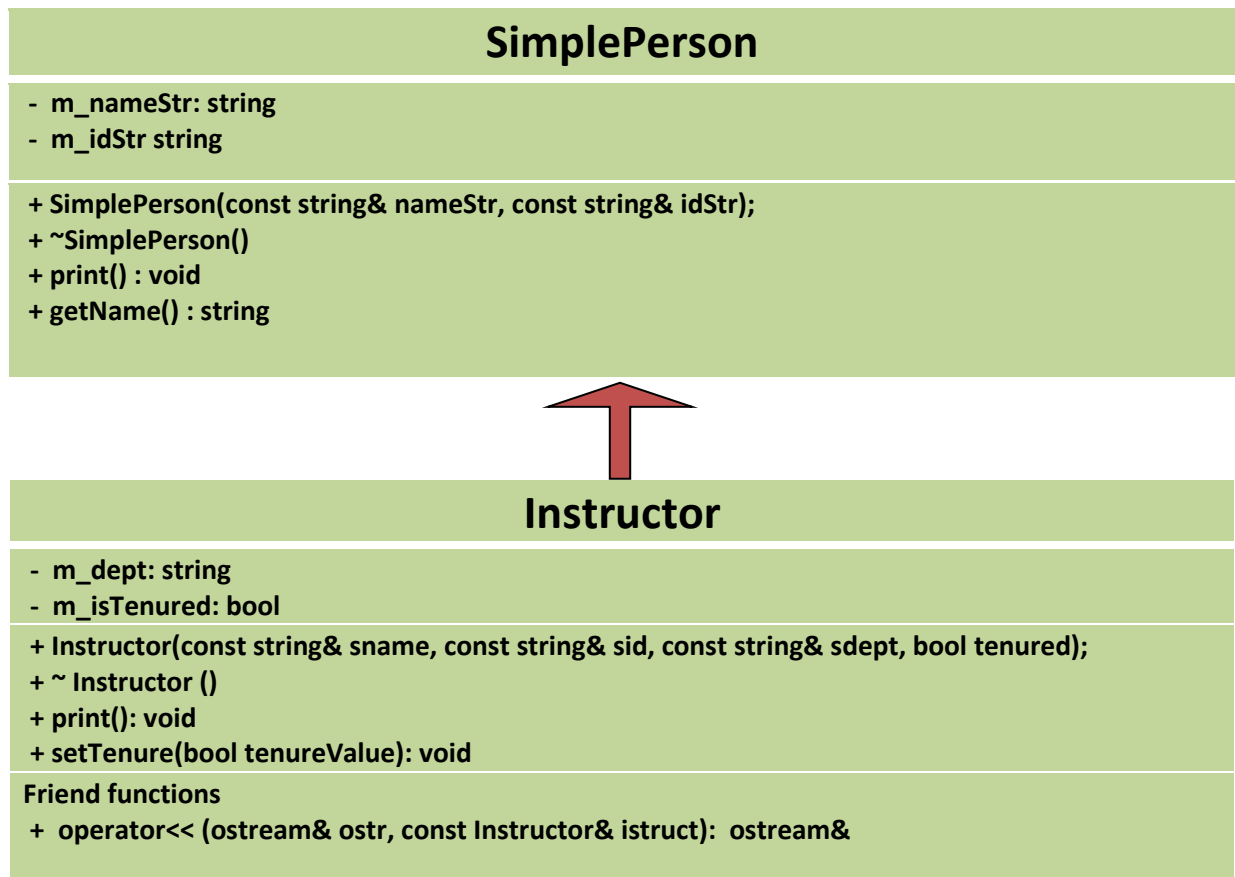
May be used for up to 5 possible bonus points to be applied to homework assignment #2

### Topics:

Create C++ classes from UML  
Explore relationship of UML hierarchy to C++ inheritance  
Investigate pointers and the usage of new and delete with respect to classes

### Task 1

Implement the two classes: SimplePerson and Instructor as described in the below UML diagrams



## Task 2

Create a file named PersonTest.cpp to test your classes.

In this file:

- Create a simple person
- Call the print() function of that person

- Create an instructor
- Call the print() function of that instructor
- Output that instructor using cout <<

Also experiment with some pointer concepts

- Create a pointer to an instructor (be sure to initialize it to NULL)

- Make the pointer point to the instructor created above
- Call the print() function using the pointer

- Use new to make the pointer point at a new instructor object
- Call the print() function using the pointer
- Set the tenure of the instructor by using the pointer to call the setTenure() function
- Call the print() function using the pointer
- Free the memory allocated for this new instructor
- Make the pointer point to NULL

Demonstrate what happens if you have a SimplePerson pointer pointing to an Instructor and use the pointer to call the print() function.