

BLG 252E HOMEWORK 2 REPORT

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1. How to Compile?

You can compile with this command: `g++ *.cpp -std=c++14`

Then simply run this command to run the program: `./a.out`

2. Grayling

This class has some const functions. I used these functions as const because these functions are getters. Data should not change. Also print function also const because of same reason.

I used print, aging and givebirth functions as virtual and set them to zero. Because I will have no fish with class type Grayling. They will have either Grayling1, Grayling2 or Grayling3 type.

They are virtual, because when I run the print function from main, it should automatically detect which type of this variable is and call the appropriate function via this.

Attributes are generally in protected, because Grayling will be base class and inherited classed should be able to Access the data of it.

3. Grayling1-2-3

This class has an attribute called `_dying_age`. Normally, this variable is same for each class. For example, for Grayling1 it is set to 5 and for Grayling2 it is set to 4. But, Grayling1 can mutate can turn into Grayling2. That's why I created this attribute so when it is mutated, this attribute will become 4. If it's mutated again, will decrease to 3 etc. It could be implemented without creating this attribute but I thought it would not be a problem.

The functions print, aging and givebirth are virtual function. So I write override at the end so, I will understand I'm overriding the function at the base.

Aging and givebirth functions are explained detaily in the code.