
Example and Review

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Exercise

- This exercise asks us to create a class called Rational to perform arithmetic with fractions
- Fraction data should be stored as numerator and denominator and should be stored in reduced form
- The class should include member functions for addition, subtraction, multiplication, division, and printing

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Class Interface

```
class Rational
{
public:
    Rational(int = 0, int = 1);
    Rational addition(const Rational &);
    Rational subtraction(const Rational &);
    Rational multiplication(const Rational &);
    Rational division(const Rational &);
    void printRational();
private:
    int numerator;
    int denominator;
    void reduction();
};
```

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Driver or Main

```
Rational cRational1(1, 3);
Rational cRational2(7, 8);
Rational cRational3;

cRational1.printRational();
cout << " + ";
cRational2.printRational();
cRational3 = cRational1.addition(d);
cout << " = ";
cRational3.printRational();
cout << '\n';
```

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Summary

- There is a test on Wednesday, Feb 28
- We have completed the following:
 - Chapter 10: Pointers
 - 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.12
 - Chapter 7: Structures and Classes
 - 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.9, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16, 7.18
- Office hours today 10-11.30am and 1-2pm. I will also be available tomorrow 1-2.15pm, then again at tea time / board games @ 4pm

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