

Lab 5.3.7 Modelling fractions: part 3

Objectives

Familiarize the student with:

- interactions between objects of the same type.

Scenario

Let's finish working on our fraction representations.

As the last task, we'll add the ability to compare fractions.

Your program should read two fractions and then print out the result of the comparison of those two fractions.

When displaying fractions, they should now be reduced to their lowest terms, so "2/4" should be replaced with "1/2".

```
#include <iostream>
#include <string>

using namespace std;

class Fraction{
public:
    Fraction(int numerator, int denominator);
    string toString();
    double toDouble();
    // ...
    bool isGreaterThan(Fraction that);
    bool isLessThan(Fraction that);
    bool isEqual(Fraction that);
private:
    int numerator;
    int denominator;
    void reduce();
};

// implement Fraction comparison methods
```

Example input

```
3 / 4
1 / 3
```

Example output

```
3/4 > 1/3
```

Example input

```
7 / 4
-6 / 10
```

Example output

```
1 3/4 > -6/10
```

Example input

7 / 4
-6 / 10

Example output

1 3/4 > -6/10