

Fraction for Humans

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1 Usage

```
Fraction one_second(1, 2);  
Fraction four_eighths(4, 8);  
Fraction three_fourths(3, 4);  
Fraction for_nerd;
```

Figure 1: Direct output to stream

```
std::cout << one_second << std::endl;  
  
1 / 2
```

Figure 2: Simplify the fraction

```
std::cout << (one_second == four_eighths) << std::endl;  
  
1
```

Figure 3: Basic Operator overload

```
std::cout << (one_second + three_fourths) << std::endl;  
std::cout << (four_eighths * three_fourths) << std::endl;  
  
5 / 4  
3 / 8
```

Figure 4: Relation Operator overload

```
std::cout << (one_second == four_eighths) << std::endl;  
std::cout << (three_fourths > one_second) << std::endl;  
  
1  
0
```

Figure 5: Input from stream

```
std::cin >> for_nerd;  
std::cout << for_nerd << std::endl;  
  
45 68  
45 / 68
```

Figure 6: To double and string

```
std::cout << (four_eighths * three_fourths).to_double() << std::endl;  
std::cout << (four_eighths * three_fourths).to_string() << std::endl;  
  
0.375  
3 / 8
```

2 Features

1. Use C++ 11
2. Simple exception handling
3. Accurate compare
4. GitHub repo : <https://github.com/HaoPatrick/oop>
5. That's all.