

## CSC 240

### Exercise 1

Add the following overloaded operators to the class `FractionType`:

- 1) `operator+`
- 2) `operator-`
- 3) `operator/`
- 4) `operator*`

Write a driver program to test the `FractionType` class provided in the Chapter 1 Source Code by utilizing the above operators. The entire textbook “SourceCode” is available under Content in Extra Files.

Here is some information regarding operator overloading:

[https://www.tutorialspoint.com/cplusplus/binary\\_operators\\_overloading.htm](https://www.tutorialspoint.com/cplusplus/binary_operators_overloading.htm)

<https://www.geeksforgeeks.org/operator-overloading-c/>

Here is an alternate sample of driver code:

```
FractionType fraction1;
fraction1.Initialize(3, 5);
FractionType fraction2;
fraction2.Initialize(5, 6);
FractionType fractionSum = fraction1 + fraction2;    //use operator+
```

Here is the signature of the `operator+`:

```
FractionType operator+(const FractionType & addend);
```

and, the implementation in the `.cpp` file:

```
FractionType FractionType::operator+(const FractionType& addend){
    FractionType frac;
    //Finish code here.
    return frac;
}
```

Keep in mind that if we don't implement the function within the declaration of the class, then we have to prepend the class name with the scope resolution operator before the function name.