

```
#ShowFractionClass.py
```

```
""" Illustrate a class that supports various operations on
fractions. Shows how to use overloaded "+" and "*" operators.
"""
```

```
from TheFractionClass import *
```

```
if __name__ == '__main__':
```

```
    # Set up two fractions...
```

```
    F1 = Fraction(2,7)
```

```
    print 'F1 = ',F1
```

```
    F2 = Fraction(3,11)
```

```
    print 'F2 = ',F2
```

```
    # Add them...
```

```
    F = F1 + F2
```

```
    print 'F1 + F2 =',F
```

```
    # Multiply them...
```

```
    F = F1 * F2
```

```
    print 'F = F1 * F2 = ',F
```

```
    # Negation...
```

```
    F3 = F.negate()
```

```
    print '-F = ',F3
```

```
    # Inversion...
```

```
    F4 = F.invert()
```

```
    print '1/F = ',F4
```

```
    # Computes  $1 + 1/2 + 1/3 + \dots + 1/n$ 
```

```
    n = 15
```

```
    print '\nDisplay  $1 + 1/2 + 1/3 + \dots + 1/k$  for  $k = 1$  to  $15$ \n' % n
```

```
    s = Fraction(0)
```

```
    for k in range(1,n+1):
```

```
        s = s + Fraction(1,k)
```

```
        intString = '%3d ' % k
```

```
        print intString,s
```