ADT Practice

Build a Rational ADT

- A rational is a fraction number such that both the enumerator and the denominator are integers, relatively prime to each other
- Build a Rational ADT such that
  - Support common arithmetic rational operations
  - x, y are two Rationals, x+y, x-y, x*y, x//y are all Rationals
  - Support comparisons
  - x,y are two Rationals, x < y, x <= y, x == y, x >= y, x > y returns a True or False

Examples of Rational

- x = 2/3, y = 1/2
- x + y == 7 / 6
- x - y == 1/6, y - x == - 1/6
- x * y == 1/3
- x // y == 4/3
- x > y True
- x >= y True
- x == y False
- x < y False
- x <= y False
- Test program is on the course website, once finished your implementation, try it out.