# Simple Double Dispatch example

class A  
  def f x    
    x.fWithA self 
  end  
  def fWithA a    
    "(a, a) case"  
  end  
  def fWithB b    
    "(b, a) case"  
  end  
end  

class B  
  def f x    
    x.fWithB self 
  end  
  def fWithA a    
    "(a, b) case"  
  end  
  def fWithB b    
    "(b, b) case"  
  end  
end  

# print A.new.f(A.new) + " # print A.new.f(B.new) + " # print B.new.f(A.new) + " # print B.new.f(B.new) + "

# Double Dispatch with a 3 by 3 matrix

class Rock  
  def fight other    
    other.fightWithRock self 
  end  
  def fightWithRock other    
    "Tie"  
  end  
  def fightWithPaper other    
    "Paper wins"  
  end  
  def fightWithScissors other    
    "Rock wins"  
  end  
end  

class Paper  
  def fight other    
    other.fightWithPaper self 
  end  
  def fightWithRock other    
    "Paper wins"  
  end  
  def fightWithPaper other    
    "Tie"  
  end  
  def fightWithScissors other    
    "Scissors wins"  
  end  
end  

class Scissors  
  def fight other    
    other.fightWithScissors self 
  end  
  def fightWithRock other    
    "Rock wins"  
  end  
  def fightWithPaper other    
    "Scissors wins"  
  end  
end  

# print Rock.new.fight(Scissors.new)