

```

-- Model solution for Tut04
--
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module Tut04
where

import Prelude hiding (sum, enumFromTo)

-- Compute the factorial of a positive number
--
-- Example: fact 6 = 720
--
fact      :: Int -> Int
fact 1    = 1
fact n | n > 1    = n * fact (n - 1)
        | otherwise = error "fact: input too small"

-- Enumerate a list of numbers in a given range
--
-- Examples: enumFromTo 3 10 = [3,4,5,6,7,8,9,10]
--           enumFromTo 4 2  = []
--
enumFromTo :: Int -> Int -> [Int]
enumFromTo m n | m > n    = []
                | otherwise = m : enumFromTo (m + 1) n

-- sum the numerals within a list
--
-- Example: sum [5, 3, 1] = 9
--
sum :: Num a => [a] -> a
sum []    = 0
sum (x:xs) = x + sum xs

-- remove all odd integers from a list
--
-- Example: removeOdd [1, 2, 3, 4, 5] = [2, 4]
--
removeOdd :: [Int] -> [Int]
removeOdd []    = []
removeOdd (x:xs) | odd x    = removeOdd xs
                 | otherwise = x : removeOdd xs

```