**9.Implement Haskell program to I) find the factorial of a number and ii) to calculate the sum of Fibonacci numbers.**

-- Function to find the factorial of a number

factorial :: Integer -> Integer

factorial 0 = 1

factorial n = n \* factorial (n - 1)

-- Function to generate the Fibonacci series

fibonacci :: Integer -> Integer

fibonacci 0 = 0

fibonacci 1 = 1

fibonacci n = fibonacci (n - 1) + fibonacci (n - 2)

-- Function to calculate the sum of Fibonacci numbers up to a given index

sumFibonacci :: Integer -> Integer

sumFibonacci n = sum [fibonacci i | i <- [0..n]]

main :: IO ()

main = do

putStrLn "Factorial of 5 is: " ++ show (factorial 5)

putStrLn "Fibonacci series up to index 10:"

mapM\_ (print . fibonacci) [0..10]

putStrLn "Sum of Fibonacci numbers up to index 10 is: " ++ show (sumFibonacci 10)