Happy Numbers

Input a number then split adding the square of both new numbers. Split the new number and add the square of the two new numbers. Continue this loop until the sum equals one making it a happy number or the sum equals four making it a sad number.

Prime Numbers

Input a number and evaluate if it is divisible by 2, 3, 5, or 7 all of which are prime themselves. If the number is not divisible by any of these numbers, then it is a prime number.

Fibonacci Sequence

Give the n starting point and ending points in the Fibonacci sequence use the golden rule to calculate the Fibonacci number.