Prime Fibonacci Numbers

THE CHALLENGE

Write a function that finds all of the prime numbers among the first *n* terms of the Fibonacci sequence.

More Details

The well-known Fibonacci sequence starts like this:

```
Fibonacci[Range[10]]
```

Out[1] = {1, 1, 2, 3, 5, 8, 13, 21, 34, 55}

Each number after the first two 1s is the sum of the two before. For example, 13 = 5 + 8.

In that list, these numbers are prime: 2, 3, 5, 13.

What Your Function Should Do

Write a function `FibonacciPrimes` that takes as input a positive integer n and finds all prime numbers among the first n Fibonacci numbers.

```
FibonacciPrimes[10]
```

Out[2] = {2, 3, 5, 13}

More Examples

```
FibonacciPrimes[15]
```

Out[3] = {2, 3, 5, 13, 89, 233}

```
FibonacciPrimes[25]
```

Out[4] = {2, 3, 5, 13, 89, 233, 1597, 28 657}

Things You May Find Useful

The built-in function Fibonacci can compute the n^{th} Fibonacci number:

```
Fibonacci[1000]
```

Out[5] = 43 466 557 686 937 456 435 688 527 675 040 625 802 564 660 517 371 780 402 481 729 089 536 555 ⋱
417 949 051 890 403 879 840 079 255 169 295 922 593 080 322 634 775 209 689 623 239 873 322 ⋱
471 161 642 996 440 906 533 187 938 298 969 649 928 516 003 704 476 137 795 166 849 228 875

Learn about Fibonacci numbers:

Fibonacci Number »

SCRATCH AREA

```
Select[Fibonacci[Range[10]], PrimeQ]
```

Out[•]= {2, 3, 5, 13}

ENTER YOUR CODE HERE

In[•]:=
```
FibonacciPrimes[n_Integer?Positive] :=
 Select[Fibonacci[Range[n]], PrimeQ]
```

Submit