Square Sum

THE CHALLENGE

Write a function that takes a positive integer *n* and outputs the result of iteratively summing and squaring the integers from 1 to *n*.

More Details

For example, here are the expressions and results for *n* = 3 and *n* = 4:

```
((1 + 2) ^2 + 3) ^2
```

Out[1] = 144

```
(((1 + 2) ^2 + 3) ^2 + 4) ^2
```

Out[2] = 21 904

What Your Function Should Do

Write a function called `SquareSum` that takes in a positive integer n and outputs the result of repeatedly summing and squaring the integers counting from 1 to n. That is, output $\left(\left(\left((1+2)^2+3\right)^2+4\right)^2+\ldots\right)^2+n\right)^2$.

```
SquareSum[3]
```

Out[3] = 144

More Examples

```
SquareSum[4]
```

Out[4] = 21 904

```
SquareSum[10]
```

Out[5] = 63 073 033 198 182 852 557 686 460 280 588 385 280 848 487 006 086 558 259 464 092 063 436 128 ⋱
175 134 417 077 664 303 895 453 873 373 039 212 220 029 711 960 864 138 033 087 202 698 165 ⋱
344 048 976 623 585 078 720 506 691 737 183 512 319 543 297 562 843 619 936 727 988 132 209 ⋱
328 160 703 301 424 563 585 824 706 897 928 104 440 032 778 766 396 489 516 930 962 875 225

SCRATCH AREA

```
Table[(x + y)^2, {x, 1, 3}, {y, 1, 3}]
```

Out[•]= {{4, 9, 16}, {9, 16, 25}, {16, 25, 36}}

In[•]:=
```
Fold[nextCal, 0, Range[3]];
nextCal[a, b] := (a + b)^2
```

ENTER YOUR CODE HERE

In[•]:=
```
SquareSum[n_Integer] /; n > 0 := Fold[cal, 0, Range[n]];
cal[x_, y_] := (x + y)^2
```

Submit