Multiples of 3 and 5

THE CHALLENGE

Write a function that takes a positive integer *n* and returns the number of multiples of both 3 and 5 up to *n*.

More Details

For example, if *n* = 100, the result is 6:

```
m3 = Table[3 n, {n, 100 / 3}]
```

Out[1] =
```
{3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48,
 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81, 84, 87, 90, 93, 96, 99}
```

```
m5 = Table[5 n, {n, 100 / 5}]
```

Out[2] =
```
{5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100}
```

```
Intersection[m3, m5]
```

Out[3] =
```
{15, 30, 45, 60, 75, 90}
```

```
Length@%
```

Out[4] =
```
6
```

What Your Function Should Do

Write a function `ThreeFive` that takes a positive integer n and returns the number of positive integers less than or equal to n that are multiples of both 3 and 5.

```
ThreeFive[10]
```

Out[5] =
```
0
```

```
ThreeFive[20]
```

Out[6] =
```
1
```

```
ThreeFive[50]
```

Out[7] =
```
3
```

More Examples

```
ThreeFive[100]
```

Out[8] = 6

```
ThreeFive[123456]
```

Out[9] = 8230

SCRATCH AREA

```
a = Table[3 n, {n, 1, 100 / 3}]
b = Table[5 n, {n, 1, 100 / 5}]
Length[Intersection[a, b]]
```

Out[•]= {3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51,
54, 57, 60, 63, 66, 69, 72, 75, 78, 81, 84, 87, 90, 93, 96, 99}

Out[•]= {5, 10, 15, 20, 25, 30, 35, 40, 45,
50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100}

Out[•]= 6

ENTER YOUR CODE HERE

```
In[•]:= ThreeFive[n_Integer] /; n > 0 :=
 Length[Intersection[Table[3 x, {x, 1, n / 3}], Table[5 y, {y, 1, n / 5}]]]
```

Submit