

Most Roman Numerals

THE CHALLENGE

Write a function to find the first integer less than n with the longest representation in Roman numerals.

More Details

Here are the numbers up to 15 in Roman numerals:

RomanNumeral [Range [15]]

Out[1] = {I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV}

The longest of these are VIII and XIII.

What Your Function Should Do

Write a function called `FindLongestRomanNumeral` that takes as input a positive integer n and returns the first base-10 number less than or equal to n whose Roman numeral representation is the longest.

FindLongestRomanNumeral [100]

Out[2] = 88

More Examples

FindLongestRomanNumeral [15]

Out[3] = 8

FindLongestRomanNumeral [500]

Out[4] = 388

SCRATCH AREA

```
a = Table[Length[Characters[RomanNumeral[x]]], {x, 1, max, 1}];  
b = Max[a];  
Max[Position[a, b]]
```

Out[]:= 88

ENTER YOUR CODE HERE

```
In[ ]:= FindLongestRomanNumeral[max_Integer?Positive] :=  
First[First[Position[  
  Table[Length[Characters[RomanNumeral[x]]], {x, 1, max, 1}], Max[  
    Table[Length[Characters[RomanNumeral[x]]], {x, 1, max, 1}]]]]]
```

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