QUIZ 4

COMP9021 PRINCIPLES OF PROGRAMMING

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$ python3
...
>>> from quiz_4 import *
>>> tri_numbers(8)
There is 1 trinumber at most equal to 8.
The largest one is 8, equal to 2 x 2 x 2.

The maximum gap in decompositions is 0.
It is achieved with:
  8 = 2 x 2 x 2
>>> tri_numbers(11)
There is 1 trinumber at most equal to 11.
The largest one is 8, equal to 2 x 2 x 2.

The maximum gap in decompositions is 0.
It is achieved with:
  8 = 2 x 2 x 2
>>> tri_numbers(12)
There are 2 trinumbers at most equal to 12.
The largest one is 12, equal to 2 x 2 x 3.

The maximum gap in decompositions is 0.
It is achieved with:
  8 = 2 x 2 x 2
  12 = 2 x 2 x 3
>>> tri_numbers(123)
There are 28 trinumbers at most equal to 123.
The largest one is 117, equal to 3 x 3 x 13.

The maximum gap in decompositions is 3.
It is achieved with:
  110 = 2 x 5 x 11
>>> tri_numbers(4321)
There are 1101 trinumbers at most equal to 4321.
The largest one is 4318, equal to 2 x 17 x 127.

The maximum gap in decompositions is 29.
It is achieved with:
  3782 = 2 x 31 x 61
  4154 = 2 x 31 x 67
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>>> tri_numbers(980234)
There are 245952 trinumbers at most equal to 980234.
The largest one is 980231, equal to 7 x 233 x 601.

The maximum gap in decompositions is 489.
It is achieved with:
  965306 = 2 x 491 x 983
  973162 = 2 x 491 x 991
  979054 = 2 x 491 x 997
```