CS110: Computer Programming Lab
Department of CSE
IIT, Guwahati

Module 02 Stage 03 Exercise 09

Problem description

Print all perfect numbers smaller than 10000000 in descending orders together with their factors in descending orders. See an example below.

The definition of a perfect number as copied from Wikipedia is as follows: *In number theory, a perfect number is a positive integer that is equal to the sum of its proper positive divisors, that is, the sum of its positive divisors excluding the number itself.*

Number six is first perfect number as numbers 1, 2 and 3 are factors of 6. And, 1+2+3 = 6.

Format for output:
```
8128 = 4064 + 2032 + 1016 + 508 + 254 + 127 + 64 + 32 + 16 + 8 + 4 + 2 + 1
496 = 248 + 124 + 62 + 31 + 16 + 8 + 4 + 2 + 1
28 = 14 + 7 + 4 + 2 + 1
6 = 3 + 2 + 1

Process returned 0 (0x0)   execution time : 43.291 s
Press any key to continue.
```