Problem 30

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[**Problem 30**](https://projecteuler.net/problem=30)

**Digit fifth powers**

Surprisingly there are only three numbers that can be written as the sum of fourth powers of their digits:

1634 = 14 + 64 + 34 + 44  
8208 = 84 + 24 + 04 + 84  
9474 = 94 + 44 + 74 + 44

As 1 = 14 is not a sum it is not included.

The sum of these numbers is 1634 + 8208 + 9474 = 19316.

Find the sum of all the numbers that can be written as the sum of fifth powers of their digits.

**各位数字的五次幂**

令人惊讶的是，只有三个数可以写成它们各位数字的四次幂之和：

1634 = 14 + 64 + 34 + 44  
8208 = 84 + 24 + 04 + 84  
9474 = 94 + 44 + 74 + 44

由于1 = 14不是一个和，所以这里并没有把它包括进去。

这些数的和是1634 + 8208 + 9474 = 19316。

找出所有可以写成它们各位数字的五次幂之和的数，并求这些数的和。