```
In [*]:
        lower=1042000
        upper=702648265
        for num in range(lower,upper+1):
            order=len(str(num))
            sum=0
            temp=num
            while temp>0:
                 digit=temp%10
                 sum += digit **order
                temp//=10
                 if num == sum:
                     print(num)
        1741725
        2097280
        2097281
        3278756
        4210818
        4782969
        4861095
In [ ]:
In [ ]:
In [ ]:
```