

Reddit Puzzle

Find a number ABCDEFGHIJ such that A is the count of how many 0's are in the number, B is the number of 1's, and so on.

<https://oeis.org/A138480>

Autobiographical numbers: the first digit specifies how many 0 in the number, the next digit specifies how many 1, etc. This version is not limited to 10 digits.	4
1210, 2020, 21200, 3211000, 42101000, 521001000, 6210001000, 72100001000, 821000001000, 9210000001000	

```
import time
start=time.time()
for i in range(1000000000, 9999999999):
    s = str(i)
    if((int(s[0]) == s.count('0')) and int(s[1]) == s.count('1')
and\
    int(s[2]) == s.count('2') and int(s[3]) == s.count('3') and\
    int(s[4]) == s.count('4') and int(s[5]) == s.count('5') and\
    int(s[6]) == s.count('6') and int(s[7]) == s.count('7') and\
    int(s[8]) == s.count('8') and int(s[9]) == s.count('9')):
        print(i)
end=time.time()
Time=end-start
print("Time to solve",int(Time/60), minutes)

#6210001000
#Time to solve 163 minutes, yeah brute force!
```