class Solution:

def intToRoman(self, num: int) -> str:

roman = {

1000: 'M',

500: 'D',

100: 'C',

50: 'L',

10: 'X',

5: 'V',

1: 'I'

}

m = {}

index = sorted(roman.keys(), reverse=True)

for i in range(len(index)):

k = index[i]

m[k] = roman[k]

if i > 0:

k2 = index[i-1]

if k2 - k in roman:

continue

m[k2 - k] = roman[k] + roman[k2]

if i > 1:

k2 = index[i-2]

if k2 - k in roman:

continue

m[k2 - k] = roman[k] + roman[k2]

index = sorted(m.keys(), reverse=True)

result = ''

for k in index:

cnt = int(num / k)

result += m[k] \* cnt

num = num % k

return result