class Solution:

def length(self, n):

l = 0

while n > 0 :

n = n/10

l = l+1

return l

def \_\_countDigitInRange(self, n):

t = 1

arr = []

arr.append(0)

for t in xrange(1, n+1):

arr.append(10\*arr[-1] + pow(10, t-1))

return arr

def countDigits(self, num, b):

if num <= 0:

return 0

n = self.length(num)

arr = self.\_\_countDigitInRange(n)

return self.\_\_numberOfDigits(num, arr,b, n)

def \_\_numberOfDigits(self, num, arr, b, n):

number\_of\_digits = 0

while n > 0:

nth = num/pow(10, n-1)

number\_of\_digits += nth\*arr[n-1]

if nth > b :

number\_of\_digits += pow(10, n-1)

elif nth == b:

number\_of\_digits += (num-nth\*pow(10, n-1))+1

num -= nth\*pow(10,n-1)

n -= 1

return number\_of\_digits