**Q. Search Fibonacci Number**

Given an integer n, search for the set of all Fibonacci numbers F = {f1∪f2∪f3∪...fn} where fi is the set of Fibonacci numbers of length ‘i’ and present in the number ‘n’. A number in fi is formed by taking ‘i’ consecutive digits from ‘n’. For example, if the value of n is 121393 then f1 = {1, 2, 3}, f2 = {13, 21}, f3 = {}, f4 = {}, f5= {} and f6= {121393} hence F = {1, 2, 3, 13, 21, 121393}. If no Fibonacci number is present then print None.

Input Format

First line contains a number, n

Output Format

Print all the Fibonacci numbers present in n, in ascending order. Print one number in one line. If no Fibonacci number is present then print None.

**Python Program**

n = str(int(input()))  
F = []  
Flag = False  
  
  
def fibonacci(a):  
 x = 0  
 y = 1  
 z = 0  
 while z <= a:  
 z = x + y  
 x = y  
 y = z  
 if z == a:  
 return True  
  
  
for length in range(1, (len(n)+1)):  
 for i in range(0, (len(n)-length+1)):  
 Flag = fibonacci(int(n[i:(i+length)]))  
 if Flag:  
 if int(n[i:(i+length)]) in F:  
 continue  
 else:  
 F.append(int(n[i:(i+length)]))  
F.sort()  
if F == []:  
 print(**"None"**)  
else:  
 for i in range(len(F)):  
 print(F[i])