# Problem



# Solution

# Enter your code here. Read input from STDIN. Print output to STDOUT

S = input()

#print(S)

lower\_case\_letters = ''

upper\_case\_letters = ''

odd\_numbers = ''

even\_numbers = ''

for element in S:

    if element.isnumeric():

        #print(element)

        if (int(element) % 2) == 0:

            even\_numbers += element

        else:

            odd\_numbers += element

    if element.isalpha():

        #print(element)

        if element.isupper():

            upper\_case\_letters += element

        else:

            lower\_case\_letters += element

lower\_case\_letters = ''.join(sorted(lower\_case\_letters))

upper\_case\_letters = ''.join(sorted(upper\_case\_letters))

odd\_numbers = ''.join(sorted(odd\_numbers))

even\_numbers = ''.join(sorted(even\_numbers))

final = lower\_case\_letters + upper\_case\_letters + odd\_numbers + even\_numbers

print(final)