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1 import sympy
2 import random
3 solved = []
4 text = input("text: ")
5 for char in text:
6     number = ord(char.lower())
7     solved.append(number)
8 x = sympy.symbols('x')
9 random_numbers=[]
10 for i in range(len(solved)):
11     r=random.randint(1,100)
12     if r not in random_numbers: random_numbers.append(r)
13 z = x - x
14 o = z + 1
15 def linterpolation(y, xs=None):
16     if xs is None:
17         xs = list(range(1, len(y) + 1))
18     assert len(y) == len(xs)
19
20     result = z
21     for j, (xj, yj) in enumerate(zip(xs, y)):
22         polynomial = o
23         for m, xm in enumerate(xs):
24             if m != j:
25                 polynomial *= (x - xm) / (xj - xm)
26         result += yj * polynomial
27     return sympy.expand(result).evalf()
28 print(random_numbers)
29 print(linterpolation(solved, random_numbers ))

```