tamuctf 2020 sigma

Saturday, March 7, 2020 12:16 PM

Just are given this big number:

103208311412521644754805923974108811831284140215201571168517801894194219912099219423152416253 02578269728072902300131153236334834643575368637343782389340044129

I noticed the first 3 digits are 103 and that is ascii for 'g'.

Led to this approach:

```
digits =
```

'10320831141252164475480592397410881183128414021520157116851780189419421991209921942315241625 302578269728072902300131153236334834643575368637343782389340044129'

```
# g 103 - 0
# i 208 - 103 = 105
\# q 311 - 208 = 103
# e 412 - 311 = 101
# m 521 - 412 = 109
# { 644 - 521 = 123
# n 754 - 644 = 110
# 3 805 - 754 = 51
# ?
offset = 0
numDigits = 3
prevNum = 0
flag = ''
while offset < len(digits):</pre>
    num = int(digits[offset:offset + numDigits])
    while num < prevNum:</pre>
        numDigits = numDigits + 1
        num = int(digits[offset:offset + numDigits])
    charCode = num - prevNum
    flag = flag + chr(charCode)
    offset = offset + numDigits
    prevNum = num
print(flag)
```

gigem{n3v3r_evv3r_r01l_yer0wn_cryptoo00oo}