#flo #disorganized

## 1 | let's go!!

Alice and Bob wanted to exchange information secretly. The two of them agreed to use the Diffie-Hellman key exchange algorithm, using p=13 and g=5. They both chose numbers secretly where Alice chose 7 and Bob chose 3. Then, Alice sent Bob some encoded text (with both letters and digits) using the generated key as the shift amount for a Caesar cipher over the alphabet and the decimal digits. Can you figure out the contents of the message?

H98A9W<sub>H6UM8W6A9D6C5ZCI9C8I</sub>JBACIFAI

 $picoCTF\{M43F4B_{M1ZR3B1F4I1H0EHN4H3NOGFHNKFN}\}\ h98a9w_{h6um8w6a9d6c5zci9c8ijbacifai}$ 

picoCTF{C43V4R<sub>C1PH3R1V4Y1X0UXD4X3DEWVXDAVD</sub>} ?????

0.026936273599087

-0.156975118120879

 $\{\{0.000228317094759+0.000156369801965 \text{i}, 0.000228317094759-0.000156369801965 \text{i}, 0.000019543959048, -0.00386801965 \text{i}, 0.000019543959048, -0.000195439048, -0.000195439048, -0.000195439048, -0.0001954048, -0.0001954048, -0.0001954048, -0.000195404, -0.0000195404, -0.000195404, -0.000195404, -0.0000195404, -0.0000195404, -0.0000195404, -0.00001$ 

-4.877111838242915+14.549833022334499i 0 0 0

0 -4.877111838242915-14.549833022334499i 0 0

0 0 37.124660035896274 0

0 0 0 -6.370436359410444

 $\Box \Box A$