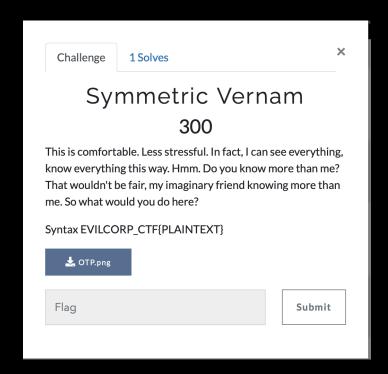


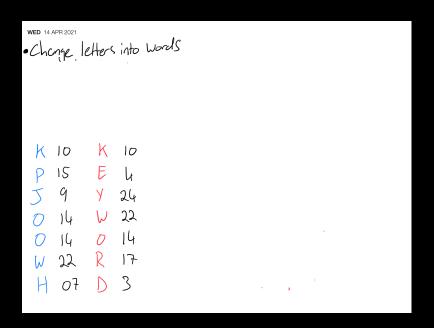
1. This challenge is a Vernam OTP cipher, downloading the png will show what to do next



2. So few things to note, the alphabet is going from 0 - 25 with there adjacent letter. The cipher text and keyword are giving for this challenge so lets break it down in steps.



3. So first step is to change both the cipher text and keyword into their numbers using the number to letter method in the png.



4. Next is to subtract the numbers so for the first letter its K - K so 10 - 10 = 0, this is done for the rest of the numbers.

```
•Change letters into words
•Sustrat cirtetex to the carresponding keyword

K 10 K 10 = 0

P 15 E 4 = 11

J 9 Y 24 = -15

O 14 W 22 = -8

O 14 O 14 = 0

W 22 R 17 = 5

H 07 D 3 = 4
```

5. Next step is to do with any minus numbers, notice the minus numbers are -15 and -8, with these values 26 must be added so the letter can be found.

```
Change letters into words

Subtract Cithotext from the corresponding keyword

If the value is a rainus, add 26 to it

K 10 K 10 = 0 = 0

P 15 E 4 = 11 = 11

J 9 Y 24 = -15 + 26 = 11

O 14 W 22 = -8 + 26 = 18

O 14 O 14 = 0 = 0

W 22 R 17 = 5 = 5

H 07 D 3 = 4 = 1
```

6. Now with the numbers change them to their corresponding letter to reveal the plaintext. The plaintext is ALLSAFE

```
WED 14 APR 2021
· Change letters into words
· Subtreat CiPhotext For the
Corresponding Keyword
If the value is a Minus, add 26 to it
change final value back to letters to set Plaintext.
                           = 0 = A
           K 10 = 0
 K 10
                          ニニーし
 P 15
             4 = 11
              24 = -15+26=11=1
 0 14 W 22 = -8 + 26 = 18 = S
 0 14 0 14 = 0 = 0 = A
                           =5 = F
         R 17 = 5
     22
         D 3 = 4 = 4 = E
     07
```

7. Put the plaintext in the flag and enter.

