🔐 Implementing a Caesar Cipher in Python! 🔐

Recently, I explored implementing a classic **Caesar Cipher** in Python. It's a simple yet fascinating encryption technique where each letter in a message is shifted by a certain number of positions in the alphabet. Here's a look at the code and some examples!

Code:

```
data = input("enter  data : ")
n = int(input("enter  shift value : "))  # Number of shifts
cipher = ""
for i in range(len(data)):   # Traversing through the data
    if data[i].isalpha():  # If the character is an alphabet
        if data[i].isupper():   # For uppercase letters (A-Z), UNICODES 65-90
            cipher += chr(((ord(data[i]) - 65 + n) % 26) + 65)
        elif data[i].islower():   # For lowercase letters (a-z), UNICODES 97-122
            cipher += chr(((ord(data[i]) - 97 + n) % 26) + 97)
    else:
        cipher += data[i]
print("Cipher:  " + cipher)
```

🔄 **Sample Outputs:**

Input 1:

enter data: Hello

enter shift value: 3

Output :

Cipher: Khoor

Input 2:

enter data: Caesar Cipher Example!

enter shift value: 5

Output :

Cipher: Hfjxfw Hnumjw Jcsjqir!

Input 3:

enter data: "The Caesar cipher technique is one of the earliest and simplest forms of encryption. It involves shifting each letter in the plaintext by a certain number of positions down or up the alphabet. Despite its simplicity, it was effective for many years, particularly for military purposes."

enter shift value: 7

Output :

Cipher: "Aol Jhlzhy jvylzopz aolyljrpl pz vul vm aol lhyspzapu huk zpztpsluaf mvyzt vm luaopthapvu. Pa puvtlslz zolapu lhcl svkkol ypun aol twlplubcma f thylz vm wlzavzopuz dulv vy vb aol hswoylzoh. Klzwtva pa zptspwjpz, pa dhz lmmlcavc mvy thuf fohz, wzapjukpylcl mvy tpjsvayz wyhzmslz."