

```

1 # Create a Array of Alphabet letters for encryption and decryption
2 alphabet = ['a', 'b', 'c', 'd', 'e', 'f',
3             'g', 'h', 'i', 'j', 'k', 'l',
4             'm', 'n', 'o', 'p', 'q', 'r',
5             's', 't', 'u', 'v', 'w', 'x', 'y', 'z']
6
7 # Using Shift Key we will be encrypting the plain_text into cipher_text
8 new *
9 def encryption(plain_text, shift_key):
10     cipher_text=""
11
12     for char in plain_text:
13
14         # Take each char from the given work and compare it with the alphabet array with its index value
15         position = alphabet.index(char)
16
17         # Formula to make the shift key move within the alphabet array
18         new_position = (position+shift_key)%26
19         cipher_text += alphabet[new_position]
20
21     print(f"Encrypted Message :{cipher_text}")
22
23 # method for decryption
24 new *
25 def decryption(cipher_text, shift_key):
26     plain_text=""
27
28     for char in cipher_text:
29         position = alphabet.index(char)
30         new_position =(position-shift_key)%26
31         plain_text += alphabet[new_position]

```

```

def encryption(plain_text,shift_key):
    print(f"Encrypted Message :{cipher_text}")

# method for decryption
new *
def decryption(cipher_text,shift_key):
    plain_text=""

    for char in cipher_text:
        position = alphabet.index(char)
        new_position =(position-shift_key)%26
        plain_text += alphabet[new_position]

    print(f"Decrypted Message : {plain_text} ")

choice =input("Encryption 'Encrypt' or Decryption 'Decrypt': \n")
text = input("Enter the text you want to encrypt \n")
shift = int(input("Enter you shift key \n"))

if choice == "Encrypt":
    encryption(plain_text=text,shift_key=shift)

elif choice == "Decrypt":
    decryption(cipher_text=text,shift_key=shift)

```

```
Run  caesar_cipher x
C:\Users\sonia\PycharmProjects\CaesarCipher\venv\Scripts\python.exe C:\Users\sonia\PycharmProjects\CaesarCipher\caesar_cipher.py
Encryption 'Encrypt' or Decryption 'Decrypt':
Encrypt
Enter the text you want to encrypt
moonlight
Enter you shift key
9
Encrypted Message :vxxwurpqc

Process finished with exit code 0
```

Run caesar_cipher x

```
C:\Users\sonia\PycharmProjects\CaesarCipher\venv\Scripts\python.exe C:\Users\sonia\PycharmProjects\CaesarCipher\caesar_cipher.py
Encryption 'Encrypt' or Decryption 'Decrypt':
Decrypt
Enter the text you want to encrypt
vxxwurpqc
Enter you shift key
9
Decrypted Message : moonlight

Process finished with exit code 0
|
```