caeserCipher.py

```python
alphabet = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r',
's', 't', 'u',
            'v', 'w', 'x', 'y', 'z', 'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm',
'n', 'o', 'p',
            'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z']


def caesar(start_text, shift_amount, cipher_direction):
    end_text = ""
    if cipher_direction == "decode":
        shift_amount *= -1
    for char in start_text:
            position = alphabet.index(char)
            new_position = position + shift_amount
            end_text += alphabet[new_position]
        else:
            end_text += char

    print(f"Here's the {cipher_direction}d result: {end_text}")
```

caeserCipher.py

```python
import art
print(art.logo)

should_continue = True
while should_continue:
    direction = input("Type 'encode' to encrypt, type 'decode' to decrypt:\n")
    text = input("Type your message:\n").lower()
    shift = int(input("Type the shift number:\n"))

    shift = shift % 26 # to accepts shift greater than alphabets count
    caesar(start_text=text, shift_amount=shift, cipher_direction=direction)

    result = input("Type 'yes' if you want to go again. Otherwise type 'no'. ")
    # continue for multiple times
    if result == "no":
        should_continue = False
        print("Goodbye")
```

art.py

```
logo = """
 ,adPPYba, ,adPPYYba,  ,adPPYba, ,adPPYba, ,adPPYYba, 8b,dPPYba,
a8"     "" ""     `Y8 a8P_____88 I8[    "" ""     `Y8 88P'   "Y8
8b         ,adPPPPP88 8PP""""""""  `"Y8ba,  ,adPPPPP88 88
"8a,   ,aa 88,    ,88 "8b,   ,aa aa    ]8I 88,    ,88 88
 `"Ybbd8"' `"8bbdP"Y8  `"Ybbd8"' `"YbbdP"' `"8bbdP"Y8 88
           88             88
          ""              88
                          88
 ,adPPYba, 88 8b,dPPYba,  88,dPPYba,   ,adPPYba, 8b,dPPYba,
a8"     "" 88 88P'    "8a 88P'    "8a a8P_____88 88P'   "Y8
8b         88 88       d8 88       88 8PP""""""" 88
"8a,   ,aa 88 88b,   ,a8" 88       88 "8b,   ,aa 88
 `"Ybbd8"' 88 88`YbbdP"'  88       88  `"Ybbd8"' 88
           88
           88
"""
```

Output:

```
(100DaysOfCoding) C:\Users\srira\100DaysOfCoding\100DaysOfCoding\Day8>python caesarChiper4.py

 ,adPPYba, ,adPPYYba,  ,adPPYba, ,adPPYba, ,adPPYYba, 8b,dPPYba,
a8"     "" ""     `Y8 a8P_____88 I8[    "" ""     `Y8 88P'   "Y8
8b         ,adPPPPP88 8PP"  `"Y8ba,  ,adPPPPP88 88
"8a,   ,aa 88,    ,88 "8b,   ,aa aa    ]8I 88,    ,88 88
 `"Ybbd8"' `"8bbdP"Y8  `"Ybbd8"' `"YbbdP"' `"8bbdP"Y8 88
           88             88
           ""             88
                          88
 ,adPPYba, 88 8b,dPPYba,  88,dPPYba,   ,adPPYba, 8b,dPPYba,
a8"     "" 88 88P'    "8a 88P'    "8a a8P_____88 88P'   "Y8
8b         88 88       d8 88       88 8PP" 88
"8a,   ,aa 88 88b,   ,a8" 88       88 "8b,   ,aa 88
 `"Ybbd8"' 88 88`YbbdP"'  88       88  `"Ybbd8"' 88
           88
           88

Type 'encode' to encrypt, type 'decode' to decrypt:
encode
Type your message:
Hello there how are you 13
Type the shift number:
45
Here's the encoded result: axeeh maxkx ahp tkx rhn 13
```

Output:

```
Type 'yes' if you want to go again. Otherwise type 'no'. yes
Type 'encode' to encrypt, type 'decode' to decrypt:
encode
Type your message:
hey 12, I am okay
Type the shift number:
6
Here's the encoded result: nke 12, o gs uqge
Type 'yes' if you want to go again. Otherwise type 'no'. yes
Type 'encode' to encrypt, type 'decode' to decrypt:
decode
Type your message:
nke 12, o gs uqge
Type the shift number:
6
Here's the decoded result: hey 12, i am okay
Type 'yes' if you want to go again. Otherwise type 'no'. no
Goodbye
```

THANK YOU