

```
def encrypt(text, shift):  
    encrypted_text = ""  
    for char in text:  
        if char.isalpha():  
            shifted = ord(char) + shift  
            if char.islower():  
                if shifted > ord('z'):  
                    shifted -= 26  
            elif char.isupper():  
                if shifted > ord('Z'):  
                    shifted -= 26  
            encrypted_text += chr(shifted)  
        else:  
            encrypted_text += char  
    return encrypted_text
```

```
def decrypt(text, shift):  
    decrypted_text = ""  
    for char in text:  
        if char.isalpha():  
            shifted = ord(char) - shift  
            if char.islower():  
                if shifted < ord('a'):  
                    shifted += 26  
            elif char.isupper():  
                if shifted < ord('A'):  
                    shifted += 26  
            decrypted_text += chr(shifted)  
        else:  
            decrypted_text += char  
    return decrypted_text
```

```
    elif char.isupper():
        if shifted < ord('A'):
            shifted += 26

        decrypted_text += chr(shifted)
    else:
        decrypted_text += char

return decrypted_text
```

```
def main():

    print("Welcome to the Caesar Cipher encryption/decryption tool!")

    while True:

        choice = input("Enter 'E' for encryption, 'D' for decryption, or 'Q' to quit: ").upper()

        if choice == 'E':

            message = input("Enter the message to encrypt: ")

            shift = int(input("Enter the shift value: "))

            encrypted_message = encrypt(message, shift)

            print("Encrypted message:", encrypted_message)

        elif choice == 'D':

            message = input("Enter the message to decrypt: ")

            shift = int(input("Enter the shift value: "))

            decrypted_message = decrypt(message, shift)

            print("Decrypted message:", decrypted_message)

        elif choice == 'Q':

            print("Thank you for using the Caesar Cipher tool. Goodbye!")

            break
```

else:

print("Invalid choice. Please try again.")

if __name__ == "__main__":

main()

OUTPUT

```
Welcome to the Caesar Cipher Encryption/Decryption Tool!  
Enter your message: help  
Enter the shift value for encryption/decryption: 3  
Do you want to encrypt or decrypt? (E/D): E  
Encrypted message: khos  
_
```