def caesar\_cipher(text, shift, mode="encrypt"):

"""Encrypt or decrypt a text using Caesar Cipher."""

result = ""

if mode == "decrypt":

shift = -shift # Reverse the shift for decryption

for char in text:

if char.isalpha(): # Check if the character is a letter

base = ord('A') if char.isupper() else ord('a')

# Shift the character and wrap around the alphabet

result += chr((ord(char) - base + shift) % 26 + base)

else:

result += char # Non-alphabetic characters remain unchanged

return result

def main():

print("Caesar Cipher Program")

while True:

mode = input("Choose mode: encrypt or decrypt (or type 'exit' to quit): ").strip().lower()

if mode == "exit":

print("Goodbye!")

break

elif mode not in ["encrypt", "decrypt"]:

print("Invalid choice. Please choose 'encrypt', 'decrypt', or 'exit'.")

continue

text = input("Enter your message: ").strip()

try:

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

except ValueError:

print("Invalid shift value. Please enter an integer.")

continue

result = caesar\_cipher(text, shift, mode)

print(f"Result ({mode}ed): {result}\n")

if \_\_name\_\_ == "\_\_main\_\_":

main()