def is\_even\_or\_odd(num):

return "Even" if num % 2 == 0 else "Odd"

def check\_number(num):

if num > 0:

return "Positive"

elif num < 0:

return "Negative"

else:

return "Zero"

def generate\_factors(num):

return [i for i in range(1, num + 1) if num % i == 0]

while True:

print("\nMenu:")

print("1. Check Even or Odd")

print("2. Check Positive, Negative, or Zero")

print("3. Generate Factors")

print("4. Exit")

choice = int(input("Enter your choice: "))

if choice == 4:

break

num = int(input("Enter a number: "))

if choice == 1:

print(is\_even\_or\_odd(num))

elif choice == 2:

print(check\_number(num))

elif choice == 3:

print("Factors:", generate\_factors(num))

else:

print("Invalid choice!")