def smallest\_factor(n):

# Verify if the input is less than 2

if n < 2:

print("Enter a number greater than or equal to 2.")

return

# Identify the smallest factor, excluding 1

for i in range(2, n + 1):

if n % i == 0:

print(f"The smallest factor other than 1 for {n} is {i}.")

break

def find\_primes\_in\_range(start, end):

primes = []

for num in range(start, end + 1):

if num > 1:

for i in range(2, int(num \*\* 0.5) + 1):

if num % i == 0:

break

else:

primes.append(num)

print(f"Prime numbers in the range {start} to {end}: {primes}")

# Get user input

try:

choice = int(input("Enter 1 to find the smallest factor and 2 to find prime the numbers in a range: "))

if choice == 1:

num = int(input("Enter an integer >= 2: "))

smallest\_factor(num)

elif choice == 2:

start\_range = int(input("Enter start of the range: "))

end\_range = int(input("Enter end of the range: "))

find\_primes\_in\_range(start\_range, end\_range)

else:

print("Invalid input. Please enter 1 or 2.")

except ValueError:

print("Invalid input. Please enter a valid integer.")