def celsius\_to\_fahrenheit(celsius):

return (celsius \* 9/5) + 32

def fahrenheit\_to\_celsius(fahrenheit):

return (fahrenheit - 32) \* 5/9

def meters\_to\_feet(meters):

return meters \* 3.28084

def feet\_to\_meters(feet):

return feet / 3.28084

def kilograms\_to\_pounds(kilograms):

return kilograms \* 2.20462

def pounds\_to\_kilograms(pounds):

return pounds / 2.20462

def unit\_converter():

print("Welcome to the Unit Converter!")

while True:

print("\nSelect an option:")

print("1. Temperature Converter (Celsius to Fahrenheit / Fahrenheit to Celsius)")

print("2. Length Converter (Meters to Feet / Feet to Meters)")

print("3. Weight Converter (Kilograms to Pounds / Pounds to Kilograms)")

print("4. Quit")

choice = input("Enter the number of your choice: ")

if choice == '1':

value = input("Enter the temperature value: ")

try:

value = float(value)

source\_unit = input("Enter source unit (C for Celsius / F for Fahrenheit): ").upper()

if source\_unit == 'C':

result = celsius\_to\_fahrenheit(value)

target\_unit = 'Fahrenheit'

elif source\_unit == 'F':

result = fahrenheit\_to\_celsius(value)

target\_unit = 'Celsius'

else:

print("Unsupported unit. Please enter C or F.")

continue

print(f"{value} {source\_unit} is {result} {target\_unit}")

except ValueError:

print("Invalid input. Please enter a numeric value.")

elif choice == '2':

value = input("Enter the length value: ")

try:

value = float(value)

source\_unit = input("Enter source unit (M for Meters / F for Feet): ").upper()

if source\_unit == 'M':

result = meters\_to\_feet(value)

target\_unit = 'Feet'

elif source\_unit == 'F':

result = feet\_to\_meters(value)

target\_unit = 'Meters'

else:

print("Unsupported unit. Please enter M or F.")

continue

print(f"{value} {source\_unit} is {result} {target\_unit}")

except ValueError:

print("Invalid input. Please enter a numeric value.")

elif choice == '3':

value = input("Enter the weight value: ")

try:

value = float(value)

source\_unit = input("Enter source unit (K for Kilograms / P for Pounds): ").upper()

if source\_unit == 'K':

result = kilograms\_to\_pounds(value)

target\_unit = 'Pounds'

elif source\_unit == 'P':

result = pounds\_to\_kilograms(value)

target\_unit = 'Kilograms'

else:

print("Unsupported unit. Please enter K or P.")

continue

print(f"{value} {source\_unit} is {result} {target\_unit}")

except ValueError:

print("Invalid input. Please enter a numeric value.")

elif choice == '4':

print("Thank you for using the Unit Converter. Goodbye!")

break

else:

print("Invalid choice. Please select a valid option (1, 2, 3, or 4).")

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

unit\_converter()