import requests

# Step 1: Define the function to fetch weather details from OpenWeather API.

def get\_weather(city, api\_key):

"""

Fetches weather details for the given city using OpenWeather API.

Args:

city (str): The name of the city to get weather for.

api\_key (str): Your OpenWeather API key.

Returns:

dict: A dictionary containing temperature, condition, humidity, and wind speed if successful.

None: If an error occurs during the API request.

"""

# TODO: Define the base URL for the OpenWeather API.

base\_url = "http://api.openweathermap.org/data/2.5/weather"

# TODO: Define the parameters for the API request, including city and API key.

params = {

"q": city,

"appid": api\_key,

"units": "metric" # Use metric units for temperature

}

# TODO: Make the API request and check if the response code is 200.

response = requests.get(base\_url, params=params)

if response.status\_code == 200:

# TODO: Parse the JSON response.

data = response.json()

# TODO: Extract relevant weather information from the response.

weather = {

"temperature": data["main"]["temp"],

"condition": data["weather"][0]["description"],

"humidity": data["main"]["humidity"],

"wind\_speed": data["wind"]["speed"]

}

return weather

else:

return None

# Step 2: Define the function to display weather information.

def display\_weather(city, weather):

"""

Displays weather information for the given city.

Args:

city (str): The name of the city.

weather (dict): A dictionary containing weather details.

"""

if weather:

# TODO: Print weather details (temperature, condition, humidity, wind speed).

print(f"\nWeather in {city}:")

print(f"Temperature: {weather['temperature']}°C")

print(f"Condition: {weather['condition'].capitalize()}")

print(f"Humidity: {weather['humidity']}%")

print(f"Wind Speed: {weather['wind\_speed']} m/s")

else:

# TODO: Print a message indicating no weather data is available.

print(f"No weather data available for {city}.")

# Step 3: Define the main function to interact with the user.

def main():

"""

Main function to interact with the user.

"""

# TODO: Replace with your OpenWeather API key.

api\_key = "e9f6767df1367e8fc62a46820733b2df"

while True:

print("\nWeather Report Application")

print("1. Get weather information")

print("2. Exit")

# TODO: Get user choice.

choice = input("Enter your choice: ")

if choice == "1":

# TODO: Get city name from the user.

city = input("Enter city name: ")

# TODO: Fetch weather information using the get\_weather function.

weather = get\_weather(city, api\_key)

# TODO: Display the fetched weather information.

display\_weather(city, weather)

elif choice == "2":

# TODO: Print exiting message and break the loop.

print("Exiting the application.")

break

else:

# TODO: Handle invalid user choice.

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

# Step 4: Call the main function to start the application.

main()