Course: Introduction to Programming Using Python

Module 16. Parallel, Multithreaded, Network Programming. Part 1

Task 1

Implement a client-server app that allows exchanging messages one-on-one. To start messaging, first we need to establish a connection. After that, the text format is used. Only two people are involved in the conversation. After the conversation ends, the server switches to waiting for a new participant in the conversation.

Task 2

Implement a client-server app for serving current weather reports. Client contacts server and indicates the country and city. After receiving the request, server returns the weather for a week for a given region. Use multithreading for this app. Weather data must be predefined and taken from a file.

Task 3

Modify Task 2. Make it to get the weather forecast from an external resource.

For this, use the website https://openweathermap.org. First, register there using this link: https://home.openweathermap.org/users/sign_up and get a key for further work. You can find the API documentation here: https://openweathermap.org/current. And now, after getting a request from the client, you need to get weather data from this source. Return the result to the client.