

browser on a computer within the current local area network and navigating to "board\_IP:8080" (e.g., "172.16.10.178:8080" as shown in Figure 3-2). Gradio automatically integrates Markdown, HTML, and other syntaxes, adapting to the format of the RKLLM model's output results, such as code snippets and Markdown text. Additionally, during the setup of RKLLM-Server, an access queue is initiated. When multiple users interact with the RKLLM-Server simultaneously, the inputs are processed and returned in the order they were submitted. It's important to note that when a user's interaction with the RKLLM-Server is in the inference state (i.e., the dialogue box is highlighted), the server will not accept the user's next input until the current inference is completed.

2) API Access: In the rkllm\_server\_demo directory, chat\_api\_gradio.py is provided. After installing gradio\_client on the PC (using the command: pip install gradio\_client), users can interact with the RKLLM-Server solely through the API interface without relying on the graphical interface, as shown in following Figure. Before using chat\_api\_gradio.py, it's important to modify the IP address in the code to match the current IP address of the development board, as shown in the following code.

```
from gradio_client import Client
client = Client("http://172.16.10.169:8080/")
```

Figure 3-7 Access the RKLLM-Server-Gradio via API calls in terminal

Users can choose between the two client invocation methods based on their specific needs. For instance, when providing interactive services within a local area network, it's recommended to use the interface access method. On the other hand, if customizing access behaviors to RKLLM-Server-Gradio is required, it's advisable to use API Access for further development.

Lastly, it's important to note that in the implementation of RKLLM-Server-Gradio, there isn't a definition of data structures for sending and receiving data similar to OpenAI-API. Therefore, this deployment implementation is not compatible with the OpenAI-API interface. When conducting further