Hands-On Workshop: Using Groq

1. Introduction

This workshop provides practical exposure to using Groq's ultra-fast LLM API. You'll learn to access the API, explore capabilities, and build a chatbot prototype using Google Colab.

2. Setting Up the Groq API

Prerequisites:

- Basic Python knowledge
- Google account (for Colab)
- Groq account (free)

Get API Key:

- Go to console.groq.com
- Sign up (no credit card needed)
- Create API Key

Store API Key in Colab:

- In Google Colab, click the key icon (Secrets) in the left sidebar
- Add a new secret named GROQ_API_KEY
- Paste your API key as the value
- Toggle notebook access on

Install Dependencies:

```
!pip install groq
```

3. First API Call

```python
from groq import Groq
from google.colab import userdata


client = Groq(api_key=userdata.get("GROQ_API_KEY"))


response = client.chat.completions.create(
    model="llama-3.3-70b-versatile",
    messages=[{"role": "user", "content": "Explain AI in simple terms"}]
)
print(response.choices[0].message.content)
```

4. Building a Chatbot

```python
from groq import Groq
from google.colab import userdata


client = Groq(api_key=userdata.get("GROQ_API_KEY"))
```

```
conversation = []

print("Chatbot started. Type 'exit' to quit.")

while True:
    user_input = input("You: ")
    if user_input.lower() == "exit":
        print("Goodbye my friend!")
        break
    conversation.append({"role": "user", "content": user_input})
    response = client.chat.completions.create(
        model="llama-3.3-70b-versatile",
        messages=conversation
    )
    reply = response.choices[0].message.content
    conversation.append({"role": "assistant", "content": reply})
    print("Bot:", reply)
```

5. Summary

This workshop demonstrates practical use of Groq, from API setup to building a chatbot. Groq's speed makes it excellent for interactive applications.