Program:

import random

def load\_txt(filename):

    #to read the contents of responses.txt and put the keyword as dictionary and random reponse as list

    config={"keywords":{},"random\_responses":[]}

    try:

        with open(filename,"r") as file:

            section=None

            for line in file:

                line=line.strip()

                if not line or line.startswith("#"):

                    continue

                if line.endswith(":"):

                    section=line[:-1].strip().lower()

                elif section=="keywords":

                    key,value=map(str.strip,line.split(":",1))

                    config["keywords"][key.lower()]=value

                elif section=="random\_responses":

                    config["random\_responses"].append(line)

    except FileNotFoundError:

        print(f"file '{filename}' not found.")

    return config

def signup\_login():

    # set up ui for login and signup

    print("If you are an old user, please log in. If new, sign up first.")

    action=input("enter 'login' or 'signup':").strip().lower()

    if action=="signup":

        username=input("enter username:")

        password=input("enter password:")

        with open("project2/user.txt","a") as file:

            file.write(f"{username},{password}\n")

        print(f"sign up successful! please log in {username}.")

        return None

    elif action=="login":

         username=input("username=")

         password=input("password=")

         try:

             with open("project2/user.txt","r") as file:

                for line in file:

                    saved\_username,saved\_password=line.strip().split(",")

                    if username==saved\_username and password==saved\_password:

                        print(f"login Successfull! welcome {username}")

                        return username

         except FileNotFoundError:

            print("user not found. please sign in!")

         print("invalid username or password.")

    else:

        print("invalid input. please try again.")

    return None

def chatbot(username, config):

    #set up dialogue ui between user and chatbot

    print(f"Hello, {username}! Type 'bye' to exit.")

    while True:

        user\_input=input(f"{username}:").strip().lower()

        if user\_input in {"bye","exit","quit"}:

            print(f"chatbot: goodbye, {username}!")

            break

        responded=False

        for keyword,response in config["keywords"].items():

            if keyword in user\_input:

                print(f"chatbot:{response}")

                responded=True

                break

        if not responded:

            random\_response=random.choice(config["random\_responses"]) if config["random\_responses"] else print("I do not understand, what you want.")

            print(f"chatbot:{random\_response}")

def ai\_page():

    #main page where all function are called and put together

    username=signup\_login()

    if username:

        config=load\_txt("project2/responses.txt")

        if config["keywords"] or config["random\_responses"]:

            chatbot(username,config)

        else:

            print("chatbot response file is empty.")

    else:

        print("please log in to use chatbot.")

# Call the function

ai\_page()

output:





