

Practical 16

Python program to demonstrate the working of a chatbot

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# Python program to demonstrate a simple chatbot

# Function to simulate chatbot responses
def chatbot_response(user_input):
    # Predefined responses
    responses = {
        "hello": "Hi there! How can I assist you today?",
        "hi": "Hello! How may I help you?",
        "how are you": "I'm just a program, but I'm functioning as expected. How about you?",
        "what is your name": "I'm ChatBot, your virtual assistant.",
        "bye": "Goodbye! Have a great day!",
        "thank you": "You're welcome! Always here to help."
    }

    # Default response if input not recognized
    default_response = "I'm sorry, I didn't understand that. Can you please rephrase?"

    # Return the matching response or default response
    return responses.get(user_input.lower(), default_response)

# Main function to run the chatbot
def main():
    print("ChatBot: Hello! I am your virtual assistant. Type 'bye' to exit.")
    while True:
```

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# Take user input
user_input = input("You: ")

# Exit the chatbot if the user types 'bye'
if user_input.lower() == "bye":
    print("ChatBot: Goodbye! Have a great day!")
    break

# Generate and display the chatbot's response
response = chatbot_response(user_input)
print(f"ChatBot: {response}")

# Run the chatbot program
if __name__ == "__main__":
    main()
```

Output

ChatBot: Hello! I am your virtual assistant. Type 'bye' to exit.

You: hello

ChatBot: Hi there! How can I assist you today?

You: what is your name

ChatBot: I'm ChatBot, your virtual assistant.

You: thank you

ChatBot: You're welcome! Always here to help.

You: bye

ChatBot: Goodbye! Have a great day!