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# Import necessary libraries

import re

import random


# Define a dictionary to store user input and corresponding
responses

responses = {

    "hello": ["Hello!", "Hi there!", "Hey!"],

    "how are you": ["I'm good, thank you!", "I'm doing well, thanks for
asking!"],

    "bye": ["Goodbye!", "See you later!", "Bye!"]

}


# Define a function to process user input and generate a response
def chatbot(input_text):

    input_text = input_text.lower() # Convert input to lowercase

    response = "I'm sorry, I don't understand." # Default response


    # Check if input matches any key in the responses dictionary
    for key in responses:

        if re.search(key, input_text):

            response = random.choice(responses[key])

            break


    return response


# Main function to interact with the user
def main():

    print("Welcome to the chatbot!")

    while True:

        user_input = input("You: ")

        if user_input.lower() == "exit":

            print("Chatbot: Goodbye!")

            break

        else:

            bot_response = chatbot(user_input)

            print("Chatbot:", bot_response)


# Call the main function to start the chatbot
if __name__ == "__main__":

    main()

```