

AI Chatbot Using Python

```
import nltk
import re

# Uncomment the following line if you haven't downloaded NLTK resources
# nltk.download('punkt')

# Responses dictionary
responses = {
    r'hello|hi|hey': 'Hello! How can I help you?',
    r'bye|goodbye': 'Goodbye!',
    r'thank you|thanks': 'You\'re welcome!',
    r'how are you': 'I am just a bot, but I am always here to help you.',
    r'what can you do': 'I am a chatbot. I can respond to some basic questions.'
}

def respond(message):
    """Generate a response to the user input."""
    for pattern, response in responses.items():
        if re.search(pattern, message, re.IGNORECASE):
            return response
    return "I'm sorry, I don't understand your question."

def main():
    print("Hello! I am your chatbot.")
    print("You can start chatting with me. Type 'bye' to exit.")
```

```
while True:

    user_input = input("You: ")
    if user_input.lower() == 'bye':
        print("Bot: Goodbye!")
        break

    response = respond(user_input)
    print("Bot:", response)

if __name__ == "__main__":
    main()
```