

5)Simple Chatbot using NLP

```
import random

def simple_chatbot():
    """A simple chatbot that responds with predefined replies."""

    print("Hello! I'm a simple chatbot. Ask me anything!")

    predefined_replies = {
        "hello": ["Hi there!", "Hello!", "Hey!"],
        "how are you": [" thank you for asking!", "I'm good!", "All
good!"],
        "what's your name": ["I don't have a name.", "I am a chatbot.",
"Call me Bot!"],
        "bye": ["Goodbye!", "See you later!", "Bye for now!"]
    }

    while True:
        user_input = input("You: ").lower()

        if user_input == "quit":
            print("Chatbot: Goodbye!")
            break

        matched = False
        for key in predefined_replies:
            if key in user_input:
                print("Chatbot:", random.choice(predefined_replies[key]))
                matched = True
                break

        if not matched:
            print("Chatbot: Sorry, I don't understand.")

# Start the chatbot
simple_chatbot()
```

```
Hello! I'm a simple chatbot. Ask me anything!
You: hello
Chatbot: Hey!
You: how are you
Chatbot: \, thank you for asking!
You: what's your nam
Chatbot: Sorry, I don't understand.
You: bye
Chatbot: Bye for now!
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```