```
In [1]: pip install nltk

        Requirement already satisfied: nltk in c:\users\debja\anaconda3\lib\site-packages
        (3.8.1)
        Requirement already satisfied: click in c:\users\debja\anaconda3\lib\site-packages
        (from nltk) (8.0.4)
        Requirement already satisfied: joblib in c:\users\debja\anaconda3\lib\site-packages
        (from nltk) (1.2.0)
        Requirement already satisfied: regex>=2021.8.3 in c:\users\debja\anaconda3\lib\site-
        packages (from nltk) (2022.7.9)
        Requirement already satisfied: tqdm in c:\users\debja\anaconda3\lib\site-packages (f
        rom nltk) (4.65.0)
        Requirement already satisfied: colorama in c:\users\debja\anaconda3\lib\site-package
        s (from click->nltk) (0.4.6)
        Note: you may need to restart the kernel to use updated packages.

In [3]: import nltk
        from nltk.chat.util import Chat, reflections

In [4]: # Pairs of patterns and responses
        pairs = [
            [
                r"(hi|hello|hey)",
                ["Hello! How can I assist you today?", "Hi there! How can I help?", "Hey! What
            ],
            [
                r"what is your name?",
                ["I am a chatbot created to assist you. You can call me ChatBot!"]
            ],
            [
                r"how are you?",
                ["I am just a bunch of code, but I am functioning as expected! How can I assi
            ],
            [
                r"(what can you do|your features)",
                ["I can answer your questions, chat with you, and provide helpful information
            ],
            [
                r"(bye|goodbye|exit)",
                ["Goodbye! Have a great day!", "Bye! Take care!", "See you later!"]
            ],
            [
                r"(.*) (location|city)",
                ["I am based in the digital world and accessible from anywhere!"]
            ],
            [
                r"(.*) weather (.*)",
                ["I don't have real-time weather data, but you can check online for accurate
            ],
            [
                r"(.*)",
                ["I'm not sure how to respond to that. Could you rephrase or ask something el
            ]
        ]
```

```
In [5]:  # Create a chatbot instance
         chatbot = Chat(pairs, reflections)
```

```
In [*]:  # Start the chatbot
         print("Welcome to the ChatBot! Type 'bye' to exit.")
         while True:
             user_input = input("You: ")
             if user_input.lower() in ['bye', 'exit', 'quit']:
                 print("ChatBot: Goodbye! Have a great day!")
                 break
             response = chatbot.respond(user_input)
             print("ChatBot:", response)
```

```
Welcome to the ChatBot! Type 'bye' to exit.
You: hi
ChatBot: Hello! How can I assist you today?
You: how  are you
ChatBot: Let me think about that. Can you ask differently?
You: what is your name
ChatBot: I am a chatbot created to assist you. You can call me ChatBot!

You: [                                          ]
```

```
In [ ]:  [                                                                 ]
```