BASIC CHATBOT USING NLTK IN PYTHON

CODE:

```python
import nltk
from nltk.chat.util import Chat, reflections

# Define a list of patterns and responses
pairs = [
    [
        r"hi|hello|hey",
        ["Hello!", "Hey there!", "Hi! How can I help you?"]
    ],
    [
        r"how are you?",
        ["I'm doing well, thank you! How about you?", "I'm fine! How can I
assist you today?"]
    ],
    [
        r"(.*) your name?",
        ["I'm a chatbot created to help you!", "You can call me ChatBot!"]
    ],
    [
        r"(.*) help (.*)",
        ["Sure! What do you need help with?", "I'm here to assist you. Please
tell me more."]
    ],
    [
        r"bye|goodbye",
        ["Goodbye! Have a great day!", "Bye! Take care."]
    ],
    [
        r"(.*)",
        ["I'm not sure I understand. Can you rephrase that?", "Interesting!
Tell me more."]
    ]
]

# Create a chatbot instance
chatbot = Chat(pairs, reflections)

def start_chat():
    print("Hello! I'm a chatbot. Type 'bye' to exit.")
    while True:
        user_input = input("You: ")
        if user_input.lower() == 'bye':
```

```python
                print("ChatBot: Goodbye! Have a great day!")
                break
        response = chatbot.respond(user_input)
        print("ChatBot:", response)

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

OUTPUT:

Hello! I'm a chatbot. Type 'bye' to exit.

You: Hii

ChatBot: Hi! How can I help you?

You: how are you

ChatBot: I'm fine! How can I assist you today?

You: nothing

ChatBot: I'm not sure I understand. Can you rephrase that?

You: please help me

ChatBot: I'm here to assist you. Please tell me more.

You: i need a help from you

ChatBot: Sure! What do you need help with?

You: i need help in the coding language

ChatBot: Sure! What do you need help with?

You: in programming language python

ChatBot: I'm not sure I understand. Can you rephrase that?

You: nothing

ChatBot: I'm not sure I understand. Can you rephrase that?

You: let it be

ChatBot: I'm not sure I understand. Can you rephrase that?

You: bye

ChatBot: Goodbye! Have a great day!