

Project: Basic Rule-Based Chatbot

Goal: Build a simple rule-based chatbot.

Scope:

- Input from user like: 'hello', 'how are you', 'bye'.
- Predefined replies like: 'Hi!', 'I'm fine, thanks!', 'Goodbye!'.

Key Concepts Used: if-elif, functions, loops, input/output.

Python Code:

```
# Basic Rule-Based Chatbot

def chatbot():
    print("Welcome to the Basic Chatbot!")
    print("Type something (hello, how are you, bye) or 'exit' to end the chat.")

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

        if user_input == "hello":
            print("Chatbot: Hi!")
        elif user_input == "how are you":
            print("Chatbot: I'm fine, thanks!")
        elif user_input == "bye":
            print("Chatbot: Goodbye!")
        elif user_input == "exit":
            print("Chatbot: Chat ended.")
            break
        else:
            print("Chatbot: I don't understand that.")

# Run the chatbot
chatbot()
```

Sample Output:

Sample Output:

```
Welcome to the Basic Chatbot!
Type something (hello, how are you, bye) or 'exit' to end the chat.
You: hello
Chatbot: Hi!
```

You: how are you

Chatbot: I'm fine, thanks!

You: bye

Chatbot: Goodbye!

You: exit

Chatbot: Chat ended.