

## PAI\_LAB\_TASK12

- **Function Definition:**

The function `chatbot()` defines the behavior of the chatbot.

**Greeting:**

The chatbot starts by printing a greeting message: "Hello! I am a simple chatbot. Ask me a question.".

- **Infinite Loop:**

The chatbot enters an infinite loop (`while True:`) where it continuously listens for user input.

- **User Input:**

The user provides input, which is captured and converted to lowercase using `input().lower()`, making it case-insensitive.

- **Greeting Response:**

If the input is "hi", "hello", or "hey", the chatbot responds with a greeting: "Chatbot: Hello! How can I assist you today?".

- **Well-being Response:**

If the input is "how are you" or "how are you doing", the chatbot responds with a message about being a program and asks how the user is doing.

- **Exit Command:**

If the input is "bye", the chatbot says goodbye and ends the loop using `break`.

- **Name Question:**

If the input contains the word "name", the chatbot replies with its name: "Chatbot: My name is SimpleBot.".

- **Weather Question:**

If the input contains the word "weather", the chatbot informs the user that it cannot provide weather information due to lack of internet access.

- **Default Response:**

If the input doesn't match any predefined conditions, the chatbot replies with: "Chatbot: Sorry, I don't understand that question.".

- **Exit Condition:**

The chatbot will continue running the loop until the user types "bye", at which point the loop exits, and the program ends.

OUTPUT:



The screenshot shows a Python IDE window with a terminal pane. The terminal displays the execution of a chatbot program. The user enters 'hi', and the chatbot responds with 'Hello! How can I assist you today?'. The user then enters 'tell me about weather', and the chatbot responds with 'I am not connected to the internet, so I cannot provide weather information.' The terminal window has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The TERMINAL tab is active, showing the command prompt and the chatbot's output. The chatbot's output is displayed in a monospaced font, and the user's input is shown in a larger font size.

```
9 | if user_input in [ hi , hello , hey ]:  
10 |     print("Chatbot: Hello! How can I assist you today?")  
  
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS  
Python + - [ ] [ ] ... ^ X  
  
PS C:\Users\Usman Ghani\Desktop\myworld> & "C:/Program Files/Python312/python.exe" "c:/Users/Usman Ghani/Desktop/myworld/PAI_LAB_Task12.py"  
Hello! I am a simple chatbot. Ask me a question.  
You: hi  
Chatbot: Hello! How can I assist you today?  
You: tell me about weather  
Chatbot: I am not connected to the internet, so I cannot provide weather information.  
You: 
```