

```
# Import necessary libraries
```

```
import re
```

```
import random
```

```
# Define a dictionary to store user  
input and corresponding responses
```

```
responses = {
```

```
    "hello": ["Hello!", "Hi there!",  
    "Hey!"],
```

```
    "how are you": ["I'm good, thank  
you!", "I'm doing well, thanks for  
asking!"],
```

```
    "bye": ["Goodbye!", "See you  
later!", "Bye!"]  
}
```

```
# Define a function to process user
```

```
input and generate a response
def chatbot(input_text):
    input_text = input_text.lower() #
    Convert input to lowercase
    response = "I'm sorry, I don't
understand." # Default response

    # Check if input matches any key
in the responses dictionary
    for key in responses:
        if re.search(key, input_text):
            response =
random.choice(responses[key])
            break

    return response

# Main function to interact with
```

the user

```
def main():
```

```
    print("Welcome to the chatbot!")
```

```
    while True:
```

```
        user_input = input("You: ")
```

```
        if user_input.lower() == "exit":
```

```
            print("Chatbot: Goodbye!")
```

```
            break
```

```
        else:
```

```
            bot_response =
```

```
chatbot(user_input)
```

```
            print("Chatbot:",
```

```
bot_response)
```

# Call the main function to start  
the chatbot

```
if __name__ == "__main__":
```

```
    main()
```