* **INTERMEDIATE** Projects:

**Task 1**AI Chatbot Development

**Description:** Create an AI chatbot using natural language processing for human interaction.

import random

def get\_response(user\_input):

greetings = ["Hello!", "Hi there!", "Greetings!"]

farewells = ["Goodbye!", "See you later!", "Farewell!"]

questions = ["How are you?", "What's your name?", "Tell me something interesting."]

user\_input\_lower = user\_input.lower()

if any(word in user\_input\_lower for word in ["hello", "hi", "hey"]):

return random.choice(greetings)

elif any(word in user\_input\_lower for word in ["goodbye", "bye", "see you"]):

return random.choice(farewells)

elif any(word in user\_input\_lower for word in ["how", "what", "tell"]):

return random.choice(questions)

else:

return "I'm sorry, I don't understand that."

def main():

print("Hello! I'm a simple chatbot.")

print("Type 'exit' to end the conversation.")

while True:

user\_input = input("You: ")

if user\_input.lower() == 'exit':

print("Goodbye!")

break

response = get\_response(user\_input)

print(f"ChatBot: {response}")

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Task 2** Python Voice Assistant

**Description:** Create a customizable voice assistant script in Python for performing a wide range of tasks based on user preferences. Harness Python's capabilities for voice interaction and automation.

[Voice Assistant](https://slashmark.cloud/Source-code/python/voice_assistant-master.zip)

import random

def get\_response(user\_input):

greetings = ["Hello!", "Hi there!", "Greetings!"]

farewells = ["Goodbye!", "See you later!", "Farewell!"]

questions = ["How are you?", "What's your name?", "Tell me something interesting."]

user\_input\_lower = user\_input.lower()

if any(word in user\_input\_lower for word in ["hello", "hi", "hey"]):

return random.choice(greetings)

elif any(word in user\_input\_lower for word in ["goodbye", "bye", "see you"]):

return random.choice(farewells)

elif any(word in user\_input\_lower for word in ["how", "what", "tell"]):

return random.choice(questions)

else:

return "I'm sorry, I don't understand that."

def main():

print("Welcome! I'm a simple voice assistant.")

print("Type 'exit' to end the conversation.")

while True:

user\_input = input("You: ")

if user\_input.lower() == 'exit':

print("Goodbye!")

break

response = get\_response(user\_input)

print(f"Voice Assistant: {response}")

if \_\_name\_\_ == "\_\_main\_\_":

main()