

```
import requests
```

```
# -----
```

```
# Data Collection Agent
```

```
# -----
```

```
def get_weather(city):
```

```
    api_key = "YOUR_API_KEY" # get from openweathermap.org
```

```
    url =
```

```
f"https://api.openweathermap.org/data/2.5/weather?q={city}&appid={api_key}&units=me  
tric"
```

```
    response = requests.get(url)
```

```
    data = response.json()
```

```
    return data
```

```
# -----
```

```
# Forecast Analysis Agent
```

```
# -----
```

```
def analyze_weather(data):
```

```
    temp = data["main"]["temp"]
```

```
    condition = data["weather"][0]["description"]
```

```
    return temp, condition
```

```
# -----
```

```
# Alert Agent
# -----

def weather_alert(temp):
    if temp > 40:
        return "⚠ Heat Alert: Stay hydrated and avoid outdoor activities."
    elif temp < 5:
        return "⚠ Cold Alert: Wear warm clothes."
    else:
        return "✅ Weather is normal."
```

```
# -----

# Recommendation Agent
# -----

def recommendations(condition):
    if "rain" in condition:
        return "☂ Carry an umbrella."
    elif "clear" in condition:
        return "☀ Good day for outdoor activities."
    elif "cloud" in condition:
        return "☁ Weather is cloudy, plan accordingly."
    else:
        return "ℹ Check weather updates regularly."
```

```
# -----
```

```
# Main Agent Controller
# -----

def weather_assistant():
    city = input("Enter city name: ")

    data = get_weather(city)

    temp, condition = analyze_weather(data)
    alert = weather_alert(temp)
    advice = recommendations(condition)

    print("\n--- Weather Assistant Agent ---")
    print("City:", city)
    print("Temperature:", temp, "°C")
    print("Condition:", condition)
    print("Alert:", alert)
    print("Recommendation:", advice)

# Run the agent
weather_assistant()
```