

```
import os
os.environ["OPENAI_API_KEY"] = "sk-proj-o9scy9gT3BlbkFJHkRNgKTH-i2KzFqlvsRWFP1rrwzQH19wsJTpVuhR-qM6NLOYVR1eM698IARLTat81"
```

```
!pip install -q langchain-openai langchain-community langchain-core requests duckduckgo-search
```

```
===== 62.4/62.4 kB 2.5 MB/s eta 0:00:00
===== 2.5/2.5 MB 34.0 MB/s eta 0:00:00
===== 3.3/3.3 MB 27.4 MB/s eta 0:00:00
===== 44.4/44.4 kB 1.9 MB/s eta 0:00:00
===== 1.2/1.2 MB 32.3 MB/s eta 0:00:00
===== 50.9/50.9 kB 2.7 MB/s eta 0:00:00
```

```
from langchain_openai import ChatOpenAI
from langchain_core.tools import tool
import requests
```

```
from langchain_community.tools import DuckDuckGoSearchRun

search_tool = DuckDuckGoSearchRun()
```

```
@tool
def get_weather_data(city: str) -> str:
    """
    This function fetches the current weather data for a given city
    """
    url = f'https://api.weatherstack.com/current?access_key=4d1d8ae207a8c845a52df8a67bf3623e&query={city}'

    response = requests.get(url)

    return response.json()
```

```
llm = ChatOpenAI()
```

```
from langchain.agents import create_react_agent, AgentExecutor
from langchain import hub
```

```
# Step 2: Pull the ReAct prompt from LangChain Hub
prompt = hub.pull("hwchase17/react") # pulls the standard ReAct agent prompt
```

```
/usr/local/lib/python3.11/dist-packages/langsmith/client.py:271: LangSmithMissingAPIKeyWarning: API key must be provide
warnings.warn()
```

```
# Step 3: Create the ReAct agent manually with the pulled prompt
agent = create_react_agent(
    llm=llm,
    tools=[search_tool, get_weather_data],
    prompt=prompt
)
```

```
# Step 4: Wrap it with AgentExecutor
agent_executor = AgentExecutor(
    agent=agent,
    tools=[search_tool, get_weather_data],
    verbose=True
)
```

```
# Step 5: Invoke
response = agent_executor.invoke({"input": "Find the capital of Madhya Pradesh, then find it's current weather condition"})
print(response)
```

```
> Entering new AgentExecutor chain...
I should first find out the capital of Madhya Pradesh and then check the current weather condition for that city.
Action: duckduckgo_search
Action Input: "capital of Madhya Pradesh"Madhya Pradesh, state of India that is situated in the heart of the country. I
Action: get_weather_data
Action Input: Bhopal{'request': {'type': 'City', 'query': 'Bhopal, India', 'language': 'en', 'unit': 'm'}, 'location':
Final Answer: The capital of Madhya Pradesh is Bhopal, and the current weather condition in Bhopal is partly cloudy wit

> Finished chain.
{'input': "Find the capital of Madhya Pradesh, then find it's current weather condition", 'output': 'The capital of Mad
```

```
response['output']
```

```
'The capital of Madhya Pradesh is Bhopal, and the current weather condition in Bhopal is partly cloudy with a temperature of 40°C.'
```

Start coding or [generate](#) with AI.