```
In [1]: pip install -U langgraph
```

```
Requirement already satisfied: langgraph in c:\users\hanshu\anaconda3\lib\site-pa
ckages (1.0.3)
Requirement already satisfied: langchain-core>=0.1 in c:\users\hanshu\anaconda3\l
ib\site-packages (from langgraph) (1.0.5)
Requirement already satisfied: langgraph-checkpoint<4.0.0,>=2.1.0 in c:\users\han
shu\anaconda3\lib\site-packages (from langgraph) (3.0.1)
Requirement already satisfied: langgraph-prebuilt<1.1.0,>=1.0.2 in c:\users\hansh
u\anaconda3\lib\site-packages (from langgraph) (1.0.4)
Requirement already satisfied: langgraph-sdk<0.3.0,>=0.2.2 in c:\users\hanshu\ana
conda3\lib\site-packages (from langgraph) (0.2.9)
Requirement already satisfied: pydantic>=2.7.4 in c:\users\hanshu\anaconda3\lib\s
ite-packages (from langgraph) (2.11.7)
Requirement already satisfied: xxhash>=3.5.0 in c:\users\hanshu\anaconda3\lib\sit
e-packages (from langgraph) (3.6.0)
Requirement already satisfied: ormsgpack>=1.12.0 in c:\users\hanshu\anaconda3\lib
\site-packages (from langgraph-checkpoint<4.0.0,>=2.1.0->langgraph) (1.12.0)
Requirement already satisfied: httpx>=0.25.2 in c:\users\hanshu\anaconda3\lib\sit
e-packages (from langgraph-sdk<0.3.0,>=0.2.2->langgraph) (0.28.1)
Requirement already satisfied: orjson>=3.10.1 in c:\users\hanshu\anaconda3\lib\si
te-packages (from langgraph-sdk<0.3.0,>=0.2.2->langgraph) (3.11.1)
Requirement already satisfied: anyio in c:\users\hanshu\anaconda3\lib\site-packag
es (from httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgraph) (4.10.0)
Requirement already satisfied: certifi in c:\users\hanshu\anaconda3\lib\site-pack
ages (from httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgraph) (2025.8.3)
Requirement already satisfied: httpcore==1.* in c:\users\hanshu\anaconda3\lib\sit
e-packages (from httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgraph) (1.0.9)
Requirement already satisfied: idna in c:\users\hanshu\anaconda3\lib\site-package
s (from httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgraph) (3.7)
Requirement already satisfied: h11>=0.16 in c:\users\hanshu\anaconda3\lib\site-pa
ckages (from httpcore==1.*->httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgrap
h) (0.16.0)
Requirement already satisfied: jsonpatch<2.0.0,>=1.33.0 in c:\users\hanshu\anacon
da3\lib\site-packages (from langchain-core>=0.1->langgraph) (1.33)
Requirement already satisfied: langsmith<1.0.0,>=0.3.45 in c:\users\hanshu\anacon
da3\lib\site-packages (from langchain-core>=0.1->langgraph) (0.4.43)
Requirement already satisfied: packaging<26.0.0,>=23.2.0 in c:\users\hanshu\anaco
nda3\lib\site-packages (from langchain-core>=0.1->langgraph) (25.0)
Requirement already satisfied: pyyaml<7.0.0,>=5.3.0 in c:\users\hanshu\anaconda3
\lib\site-packages (from langchain-core>=0.1->langgraph) (6.0.2)
Requirement already satisfied: tenacity!=8.4.0,<10.0.0,>=8.1.0 in c:\users\hanshu
\anaconda3\lib\site-packages (from langchain-core>=0.1->langgraph) (9.0.0)
Requirement already satisfied: typing-extensions<5.0.0,>=4.7.0 in c:\users\hanshu
\anaconda3\lib\site-packages (from langchain-core>=0.1->langgraph) (4.14.1)
Requirement already satisfied: jsonpointer>=1.9 in c:\users\hanshu\anaconda3\lib
\site-packages (from jsonpatch<2.0.0,>=1.33.0->langchain-core>=0.1->langgraph)
(3.0.0)
Requirement already satisfied: requests-toolbelt>=1.0.0 in c:\users\hanshu\anacon
da3\lib\site-packages (from langsmith<1.0.0,>=0.3.45->langchain-core>=0.1->langgr
aph) (1.0.0)
Requirement already satisfied: requests>=2.0.0 in c:\users\hanshu\anaconda3\lib\s
ite-packages (from langsmith<1.0.0,>=0.3.45->langchain-core>=0.1->langgraph) (2.3
2.5)
Requirement already satisfied: zstandard>=0.23.0 in c:\users\hanshu\anaconda3\lib
\site-packages (from langsmith<1.0.0,>=0.3.45->langchain-core>=0.1->langgraph)
(0.24.0)
Requirement already satisfied: annotated-types>=0.6.0 in c:\users\hanshu\anaconda
3\lib\site-packages (from pydantic>=2.7.4->langgraph) (0.6.0)
Requirement already satisfied: pydantic-core==2.33.2 in c:\users\hanshu\anaconda3
\lib\site-packages (from pydantic>=2.7.4->langgraph) (2.33.2)
Requirement already satisfied: typing-inspection>=0.4.0 in c:\users\hanshu\anacon
```

```
da3\lib\site-packages (from pydantic>=2.7.4->langgraph) (0.4.1)
Requirement already satisfied: charset_normalizer<4,>=2 in c:\users\hanshu\anacon
da3\lib\site-packages (from requests>=2.0.0->langsmith<1.0.0,>=0.3.45->langchain-
core>=0.1->langgraph) (3.3.2)
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\users\hanshu\anaconda3\li
b\site-packages (from requests>=2.0.0->langsmith<1.0.0,>=0.3.45->langchain-core>=
0.1->langgraph) (2.5.0)
Requirement already satisfied: sniffio>=1.1 in c:\users\hanshu\anaconda3\lib\site
-packages (from anyio->httpx>=0.25.2->langgraph-sdk<0.3.0,>=0.2.2->langgraph) (1.
3.0)
Note: you may need to restart the kernel to use updated packages.
```

In [2]:
```python
%pip install ipython

from langgraph.graph import StateGraph, END
from typing import TypedDict
from IPython.display import Image, display
```

```
Requirement already satisfied: ipython in c:\users\hanshu\anaconda3\lib\site-pack
ages (8.30.0)
Requirement already satisfied: decorator in c:\users\hanshu\anaconda3\lib\site-pa
ckages (from ipython) (5.2.1)
Requirement already satisfied: jedi>=0.16 in c:\users\hanshu\anaconda3\lib\site-p
ackages (from ipython) (0.19.2)
Requirement already satisfied: matplotlib-inline in c:\users\hanshu\anaconda3\lib
\site-packages (from ipython) (0.1.7)
Requirement already satisfied: prompt-toolkit<3.1.0,>=3.0.41 in c:\users\hanshu\a
naconda3\lib\site-packages (from ipython) (3.0.43)
Requirement already satisfied: pygments>=2.4.0 in c:\users\hanshu\anaconda3\lib\s
ite-packages (from ipython) (2.19.1)
Requirement already satisfied: stack-data in c:\users\hanshu\anaconda3\lib\site-p
ackages (from ipython) (0.6.3)
Requirement already satisfied: traitlets>=5.13.0 in c:\users\hanshu\anaconda3\lib
\site-packages (from ipython) (5.14.3)
Requirement already satisfied: colorama in c:\users\hanshu\anaconda3\lib\site-pac
kages (from ipython) (0.4.6)
Requirement already satisfied: wcwidth in c:\users\hanshu\anaconda3\lib\site-pack
ages (from prompt-toolkit<3.1.0,>=3.0.41->ipython) (0.2.13)
Requirement already satisfied: parso<0.9.0,>=0.8.4 in c:\users\hanshu\anaconda3\l
ib\site-packages (from jedi>=0.16->ipython) (0.8.4)
Requirement already satisfied: executing>=1.2.0 in c:\users\hanshu\anaconda3\lib
\site-packages (from stack-data->ipython) (2.2.1)
Requirement already satisfied: asttokens>=2.1.0 in c:\users\hanshu\anaconda3\lib
\site-packages (from stack-data->ipython) (3.0.0)
Requirement already satisfied: pure_eval in c:\users\hanshu\anaconda3\lib\site-pa
ckages (from stack-data->ipython) (0.2.3)
Note: you may need to restart the kernel to use updated packages.
```

In [3]:
```python
class MyState(TypedDict):
    message: str

#Define the start node
def start_node(state: MyState) -> MyState:
    print("Start node received:", state["message"])
    #process or pass the the message to the end node
    return {"message": state["message"] + " -> processed by start"}


#define the end node
def end_node(state: MyState) -> MyState:
```

```
    print("End node received:", state["message"])
    return state

#Build the graph
builder = StateGraph(MyState)
```

In [4]:
```
#Build the graph
builder = StateGraph(MyState)
```

In [5]:
```
#Add nodes
builder.add_node("start", start_node)
builder.add_node("end", end_node)
```

Out[5]: `<langgraph.graph.state.StateGraph at 0x2a0edef1fa0>`

In [6]:
```
#Define the flow
builder.set_entry_point("start")
builder.add_edge("start", "end")
builder.add_edge("end", END)      #END is a special maker for graph completion
```

Out[6]: `<langgraph.graph.state.StateGraph at 0x2a0edef1fa0>`

In [7]:
```
#Compile the graph
graph = builder.compile()
```

In [8]:
```
#Run the graph
result = graph.invoke({"message": "Hello LangGraph"})
print("Final result:", result["message"])
```

```
Start node received: Hello LangGraph
End node received: Hello LangGraph -> processed by start
Final result: Hello LangGraph -> processed by start
```

In [ ]:

In [ ]:
```
#graph_builder.compile()
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[9], line 1
----> 1 graph_builder.compile()

NameError: name 'graph_builder' is not defined
```

In [ ]:
```
# graph = graph_builder.compile()
```