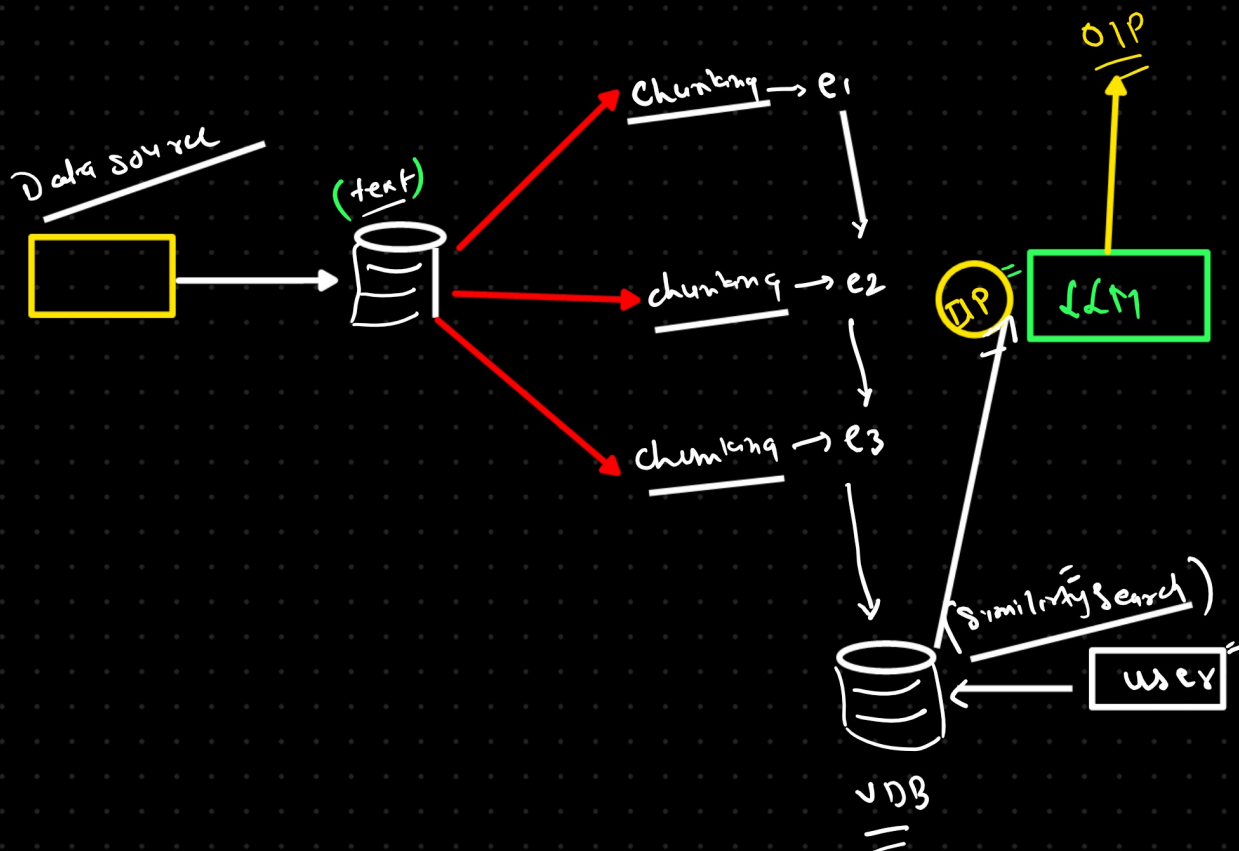
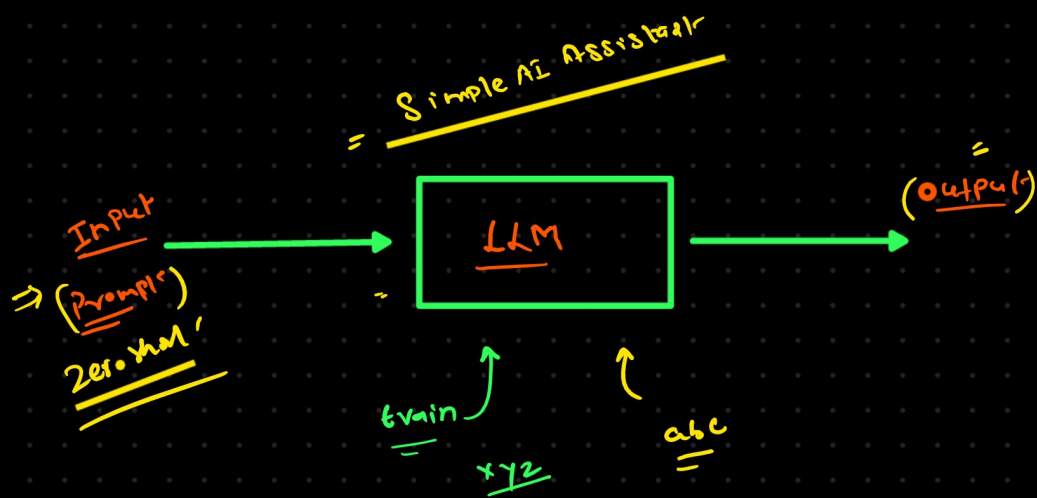
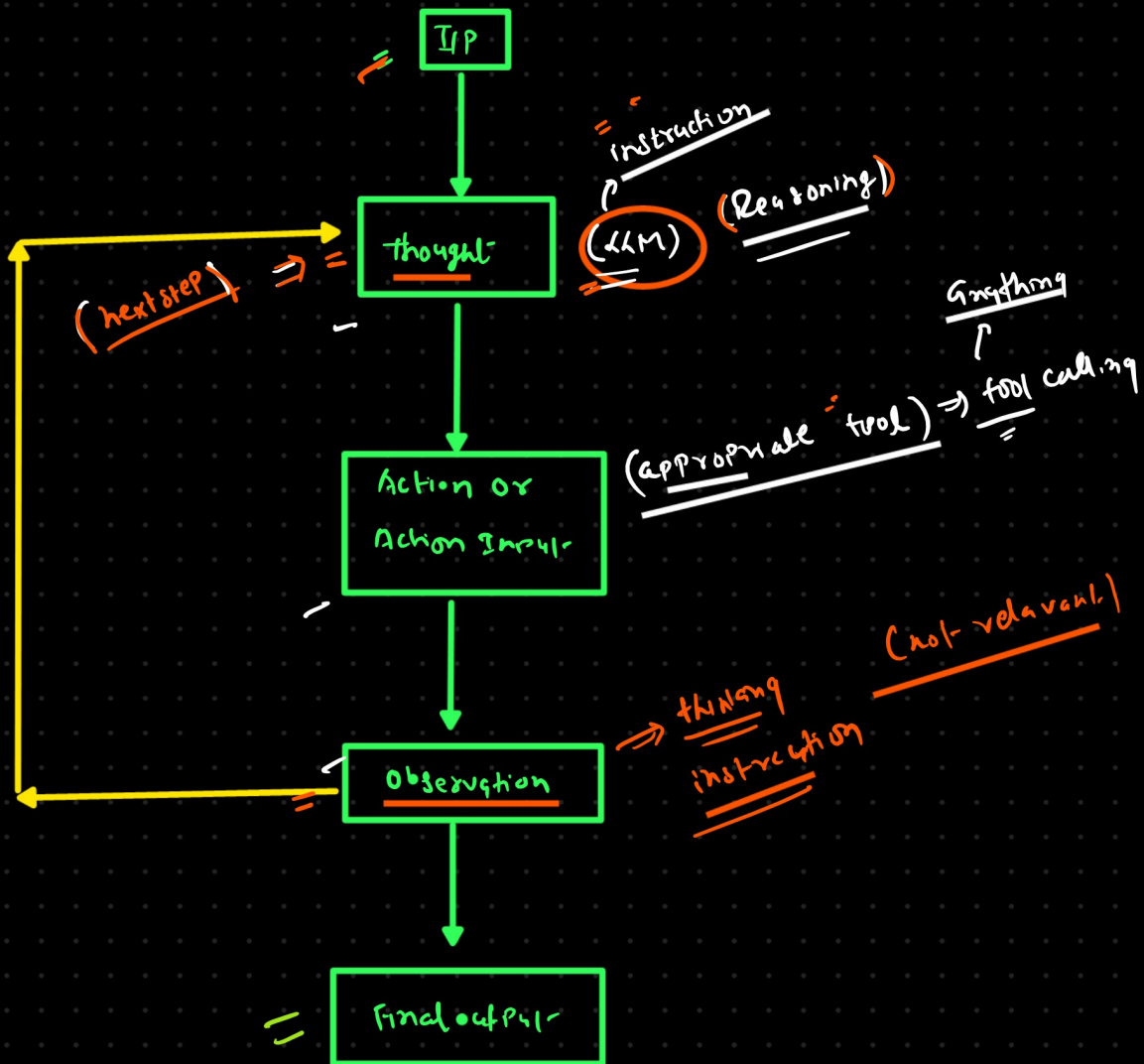
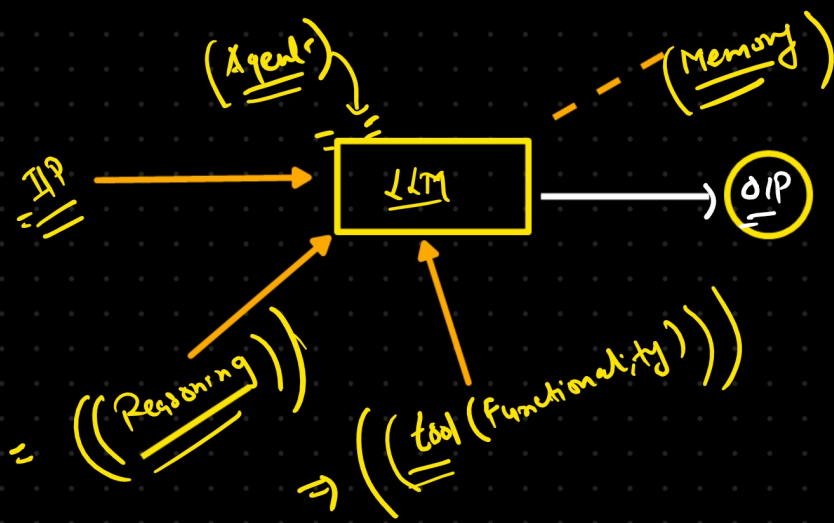


- ① AI Agent
- ② Framework
- ③ LangGraph =
- ④ Chatbot  $\Rightarrow$  Agent =





① Langchain → Langgraph → Langflow

② LlamaIndex

③ Autogen

④ Crewai

⑤ Pydantic

⑥ Anthropic AI

⑦ Vertex AI

⑧ OpenAI Swarm

Langgraph → graph ⇒ basic  
→ Stategraph ⇒ conversion

graph ⇒ (node, edge)  
↓  
function  
function 1 → function 2  
→ relation

Agent ⇒ (Pattern) → read  
= IIP → Tool → obj → output  
LLM

