

# DEMYSTIFYING AGENTIC AI

AARUSHI AIYYAR

W H A T

# WHAT ARE AI AGENTS?

PERCIEVE

Get input from the world

THINK

...

ACT

In real world



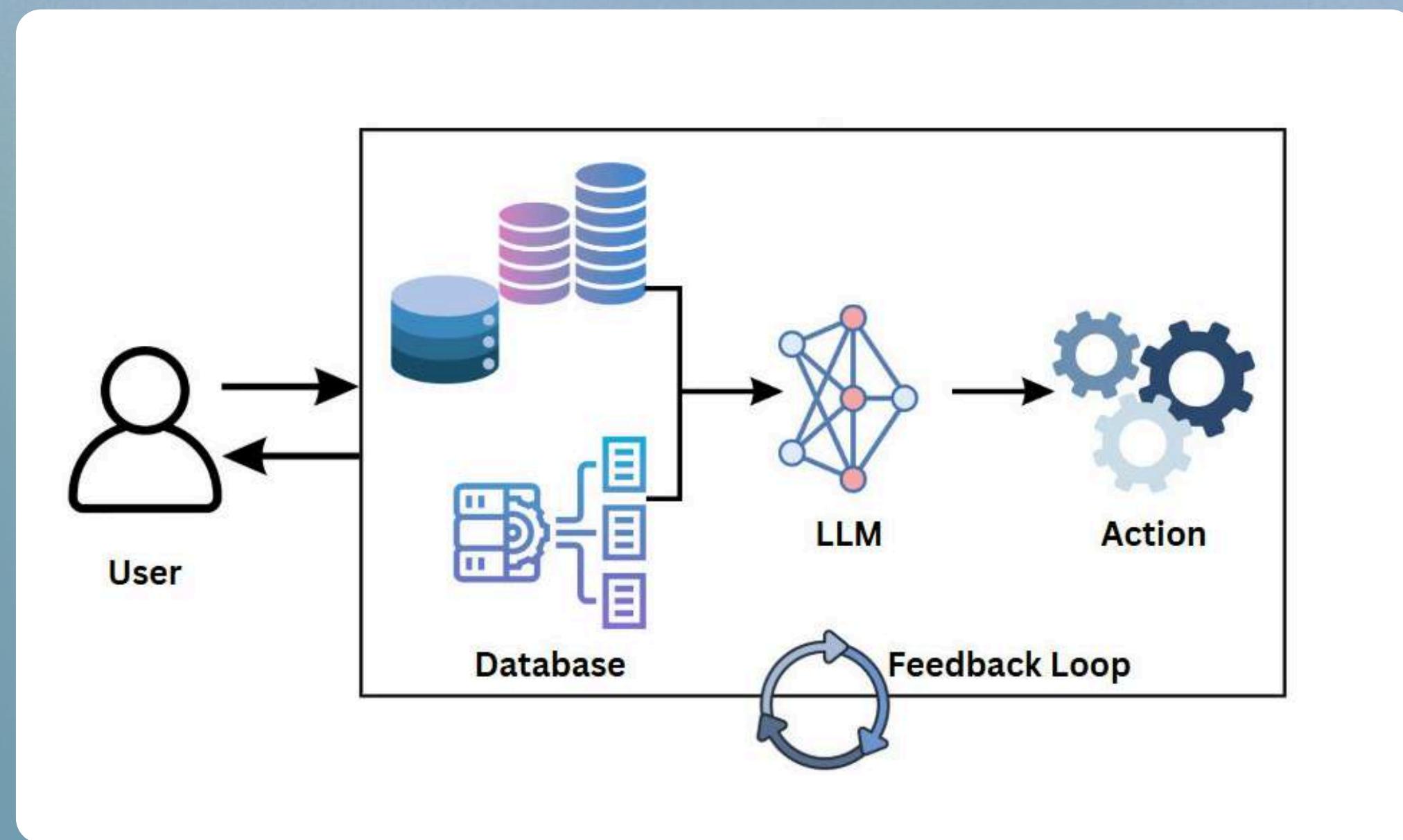
# WHAT ARE AI AGENTS?

Quiz time: Identify the Agentic AI systems

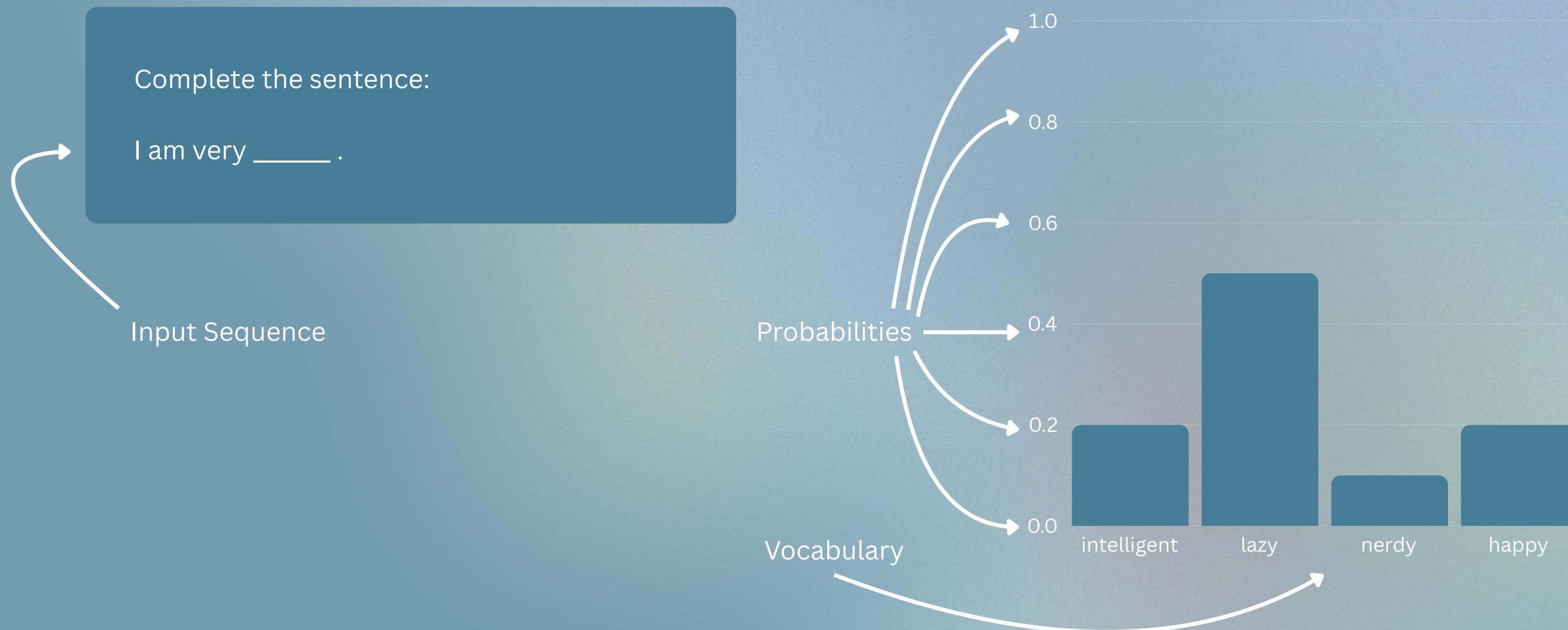
1. Garden sprinkler runs every day at 6:00 a.m.
2. Sprinkler adjusts watering based on soil sensors, weather forecasts, and local restrictions to hit a weekly water target.
3. Spreadsheet macro cleans a dataset when you click a button.
4. Inbox helper given “zero inbox today” triages, drafts and sends replies, schedules meetings, and unsubscribes using connected apps.
5. Vision model that classifies medical images into labels.
6. Support chatbot that can issue refunds via the payment API within policy limits and escalates when uncertain.
7. Trip tool generates a day-by-day itinerary but never books or changes anything.
8. Home robot hears “prep for guests tonight” and then tidies, runs dishwasher, orders supplies, and pings you when done.
9. Git bot suggests edits but requires your approval for every individual step before acting.
10. Lawn mower maps the yard, plans routes, avoids obstacles, returns to charge, and resumes; it also skips mowing after rain.

H O W

# AI Agent: HL Diagram



# How do LLMs work?



# How do LLMs work?



What is the core problem?

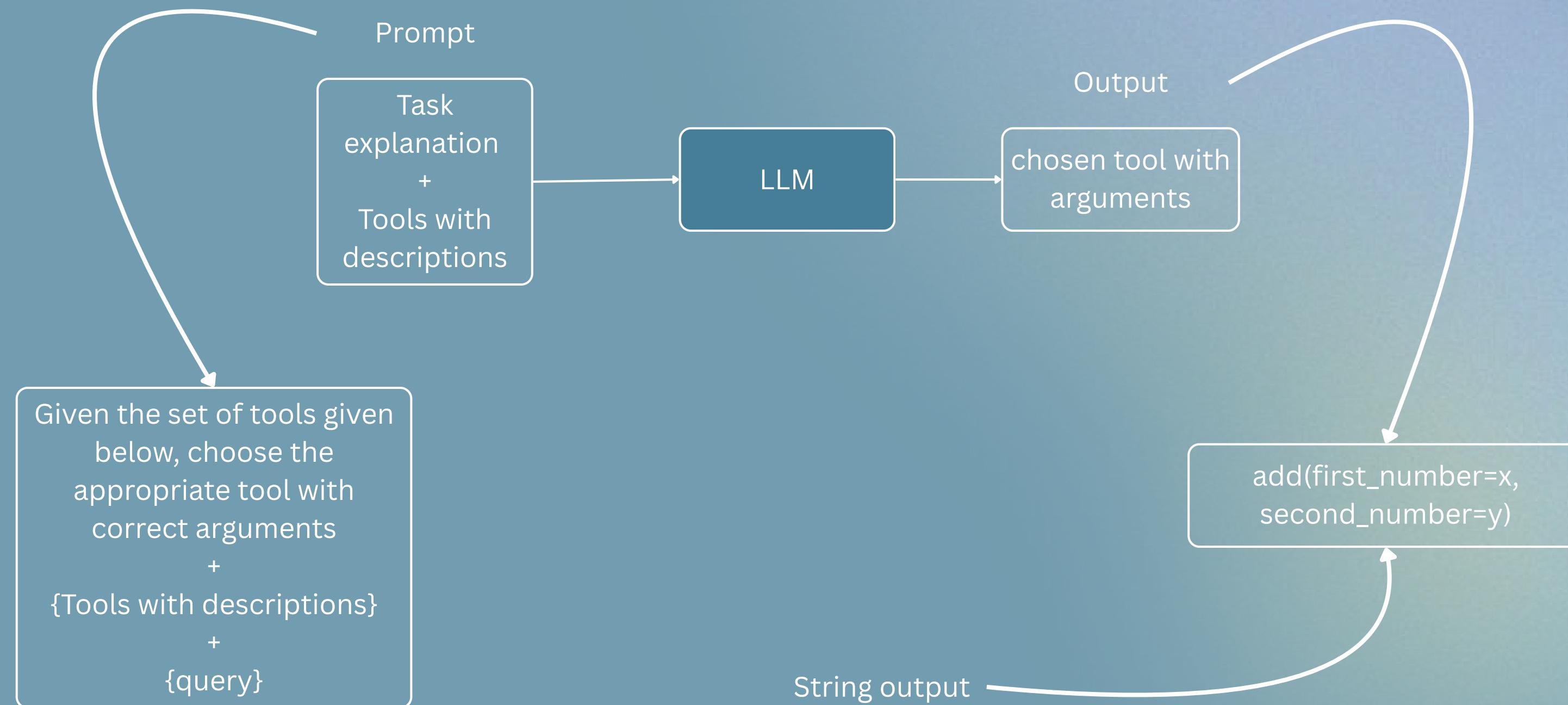
Converting a set of words ( $\text{seq\_len}$ ) to ( $\text{vocab\_size}$ )

So mapping  $\text{seq\_len}$  vector to  $\text{vocab\_size}$  vector suffice?

# Important Terms

- Prompting
  - What?
  - How?
  - Why? (Homework :))
- COT prompting
  - What?
  - How?
  - Why? (Homework :))
- Reasoning
  - What?
  - How?
  - Why?

# Tool Determination



# Task Execution

1. Get LLM output (string)
2. Postprocess to get required format
3. Based on output call the function

```
add(first_number=x,  
second_number=y)
```

```
out_func = "add"  
arg1 = "x"  
arg2 = "y"
```

```
if out_func == "add":  
    res = add(arg1, arg2)  
if out_func == "sub":  
    res = sub(arg1, arg2)  
. . .
```

And this way you get desired output!

THANK YOU