Lists and Indexing
Day 3 – PH 365

1 Oct 2024

Variables vs. Lists

Basic variables:

- Storing one value each
- Can have many variables for many values

Lists:

- Storing many values in one list
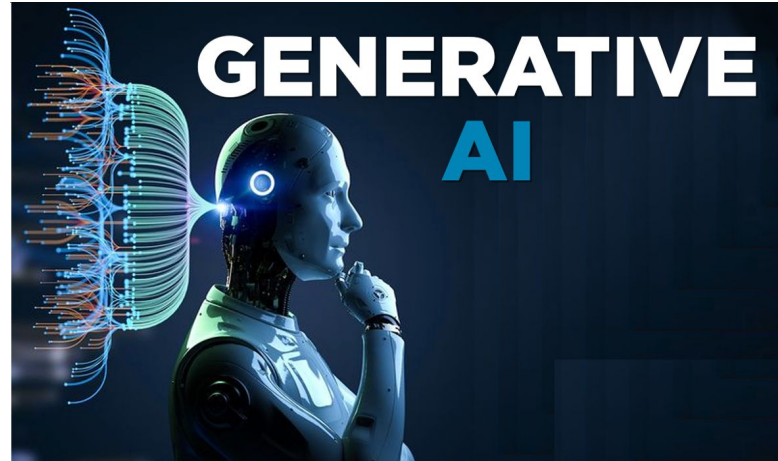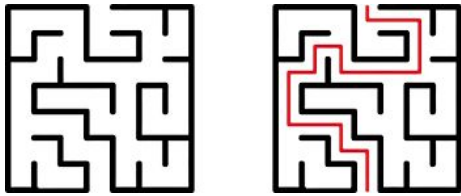- Values are ordered inside the list

A list would be nice...

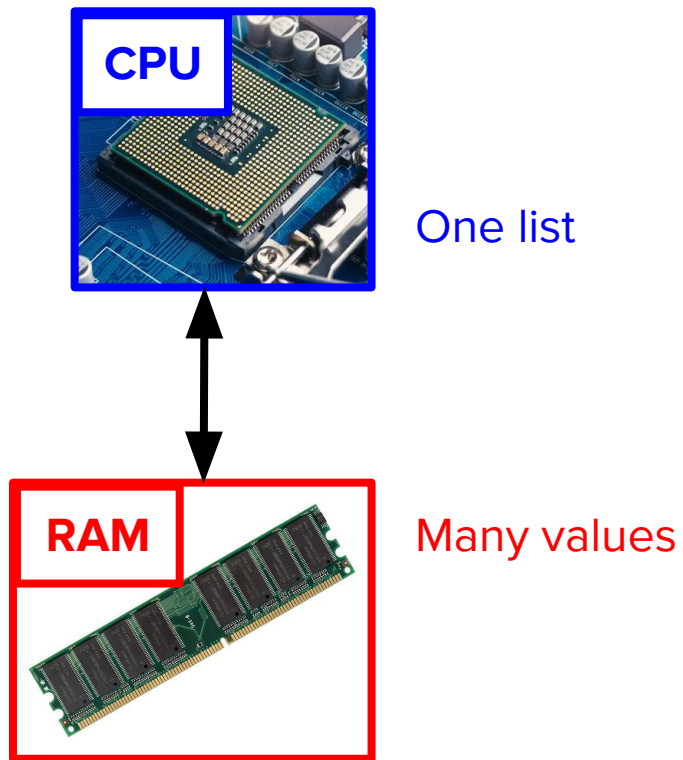PLEASE for the love of GOD use a list!!!

The First Lists

- Lists created in 1957 for the **General Problem Solver** computer program
- The first program to analyze an input and work towards a solution

Lists in the Computer

CPU

One list

RAM

Many values

One dresser

Clothes inside each drawer

Values inside of a List

How do values get in the list in the first place?

```
list = [value, value, ..., value]
```

```python
# one variable, five values!
buildings = ["Weniger", "Kelley", "Bexell", "Milam", "Valley Library"]
```

How do we access those values?

```
list[index]
```

(count from 0, use square brackets)

```
buildings[0]
buildings[1]
buildings[4]
```