

LIS-3353

From Instructions to AI

HUGE CONCEPT #2

*All computers do is follow a very precise **list of instructions** that one or more people wrote.*

Understanding Power

```
10 PRINT "John is AWESOME";  
20 GOTO 10
```

Teaching the robots to escape

- 1) If there's a door in arms-reach, **exit - you're done**, **else**
- 2) If you can, take one step forward **then goto 1)**, **else**
- 3) Rotate to the left until there's not a wall in front of you **then goto 1)**

(this will get you out of any "regular" empty room)

An almost random bit on recursion

- In computers, it's actually okay to define something with itself.

PSUEDOCODE!

Define function="EscapeFromRoom"{

1) If there's a door in arms-reach, exit - you're done, else

2) If you can, take one step forward then EscapeFromRoom, else

3) Rotate to the left until there's not a wall in front of you then EscapeFromRoom

}

(this will get you out of any "regular" empty room)

Go to the store; if they have 2% lactose free chocolate milk, then get me a carton.

Misusing Power

```
go to the store;
```

```
if [[ they have 2% lactose free  
chocolate milk]]
```

```
then
```

```
    get me a carton.
```

The Magic Genie
Recursion, trees, and “crowdsourcing”

{0) Start with “Is it Batman”?

1) Ask my (yes/no) questions down the tree

2) If win, “yay”

3) If lose, add/replace new last question to one for which my guess was wrong and her guess was right (*optionally, try to be general or “half-y”?*)

- repeat until genius