Discussion 3

"What have I gotten myself into?"

“What’s a mantissa?”

Block Review

(quick lecture recap)

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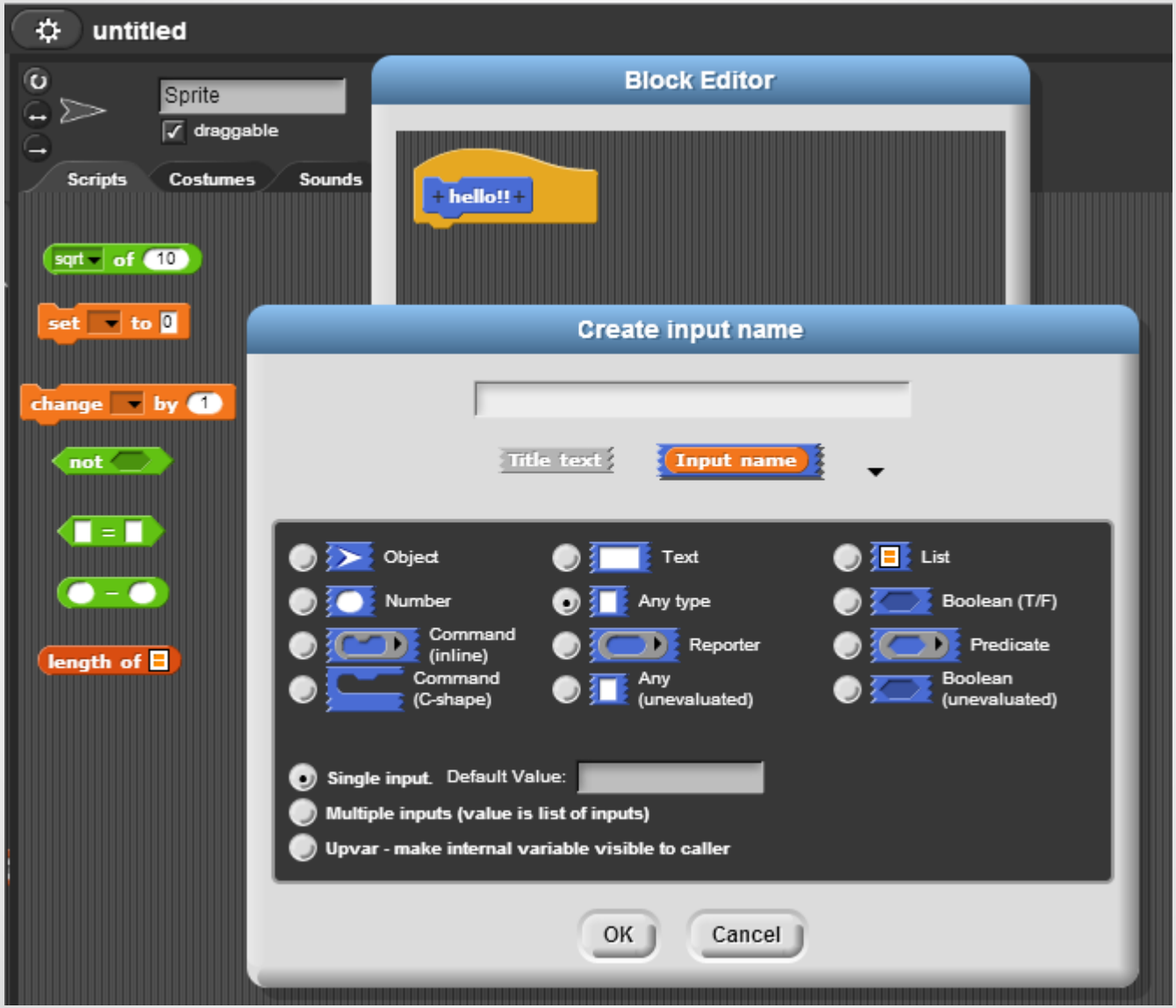
Types

- Command
  - Not meant to report = No outputs
  - Used primarily for side-effects
  - (Not functions)

- Reporter
  - (Mostly) Functions
  - Reports a specific value
  - No side-effects

- Predicate
  - Functions
  - Report Boolean values
    - True or False
  - No side-effects

A Side Note on Inputs



A Side Note on Inputs

From *Simply Scheme*:

The technical term for "the things that a function accepts as an argument" is the ***domain*** of the function. The name for "the things that a function returns" is its ***range***.

Domain and Range

Domain 1 of multiply?

Domain 2 of multiply?

Range of multiply?

Domain 1 of contains?

Domain 2 of contains?

Range of contains?

Domain and Range

Domain 1 of multiply? number

Domain 2 of multiply? number

Range of multiply? number

Domain 1 of contains? list

Domain 2 of contains? anything

Range of contains? boolean

Domain and Range

From Fall 2011:

Question 6a : The function `foo` is used in the following way (and you have no idea what `a`, `b`, or `c` are). What can you say about the *domain* and *range* of `foo`?

Domain of `foo` (first argument):

Domain of `foo` (second argument):

Range of `foo`:

Domain and Range

From Fall 2011:

Question 6a : The function `foo` is used in the following way (and you have no idea what `a`, `b`, or `c` are). What can you say about the *domain* and *range* of `foo`?

Domain of `foo` (first argument): **boolean**

Domain of `foo` (second argument): **number**

Range of `foo`: **boolean**

Is there anything wrong here?

Answer!

assume a, b, and c are all distinct

Oh dear Mod. What happened?

- 

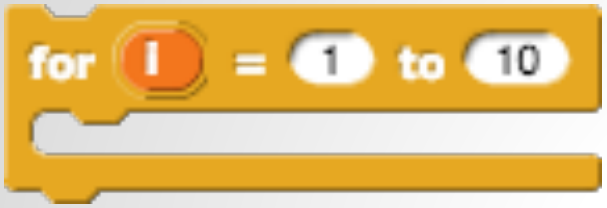
= 3

- Like the "Remainder" you remember from elementary school division

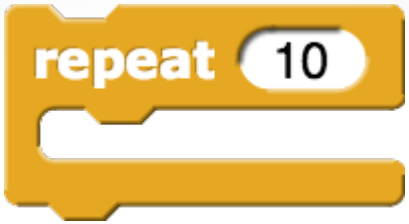
- 2 R:3 ← mod returns this value

  5 |

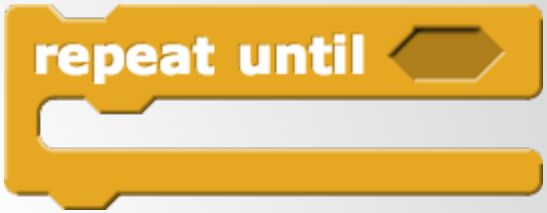
Rinse and Repeat… and Repeat Until



- Like simple Repeat
- i increases as loop runs



- Only loops a finite (x) number of times
- Equivalent to copying and pasting inner portion of code (x) times



- Acts like simple Repeat
- Loops UNTIL the boolean (hexagon function) becomes true.
- Like poking your sibling until they yell at you to stop

A Short Lengthy Discussion

- Red (list block)
- Only for lists

- Green ("word" block)
- Only for words