

Discussion 4

"What have I gotten myself into?"

"What's a mantissa?"

Programming Paradigms

Question 4: Draw lines to match the four programming paradigms with their descriptions.

- a) functional
- b) imperative
- c) object-oriented
- d) declarative

- 1) answer a question via search for a solution
- 2) construct instances from classes and send messages between them
- 3) follow a list of instructions one by one
- 4) evaluate an expression and use the result

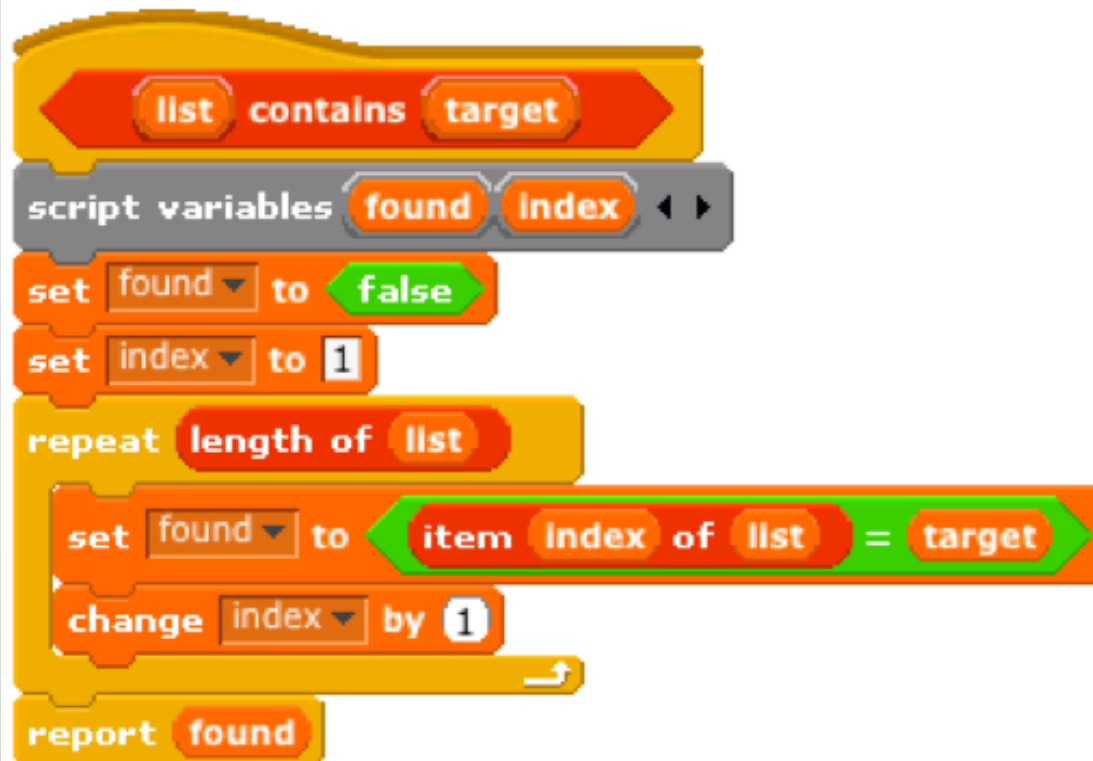
Programming Paradigms

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- | | | |
|--------------------|---|--------------------------------------------------------------------|
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| b) imperative | → | 4) evaluate an expression and use the result |
| c) object-oriented | → | 2) construct instances from classes and send messages between them |
| d) declarative | → | 3) follow a list of instructions one by one |

Debugging

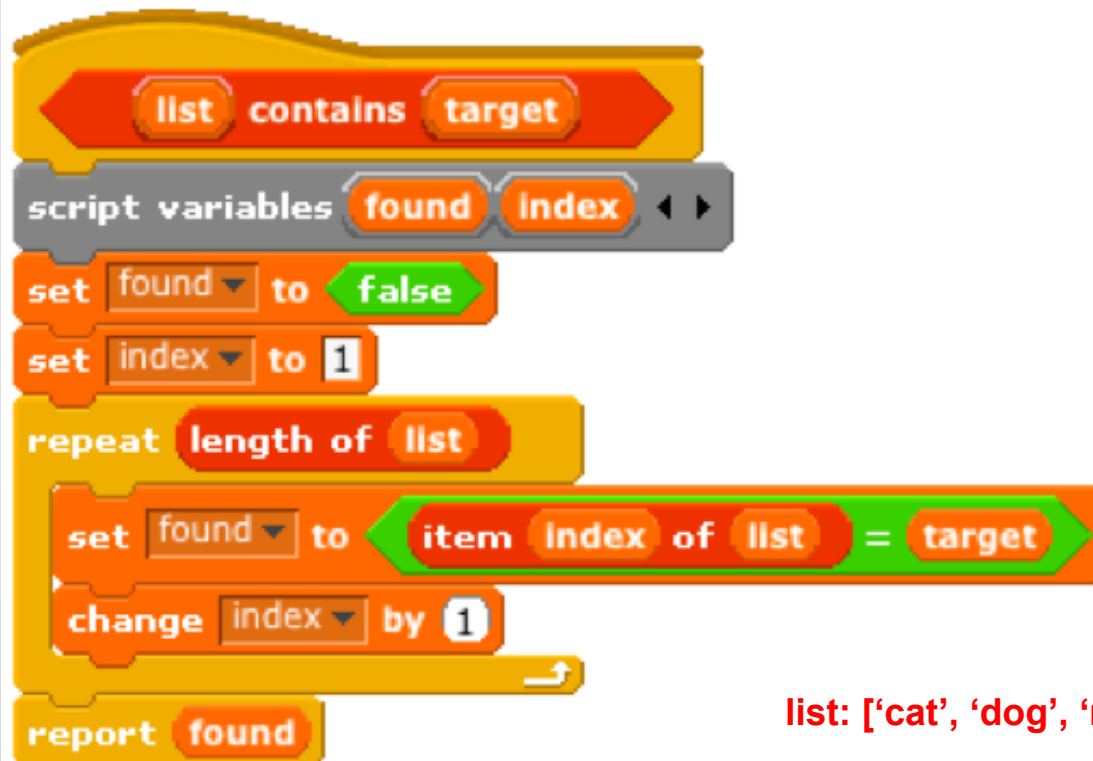
Question 8: We are trying to write a new predicate block that will return **true** when a particular value is present within a list. Unfortunately, there is a bug.



a) Give an example of values of **list** and **target** for which this code works correctly, despite the bug.

Debugging

Question 8: We are trying to write a new predicate block that will return **true** when a particular value is present within a list. Unfortunately, there is a bug.

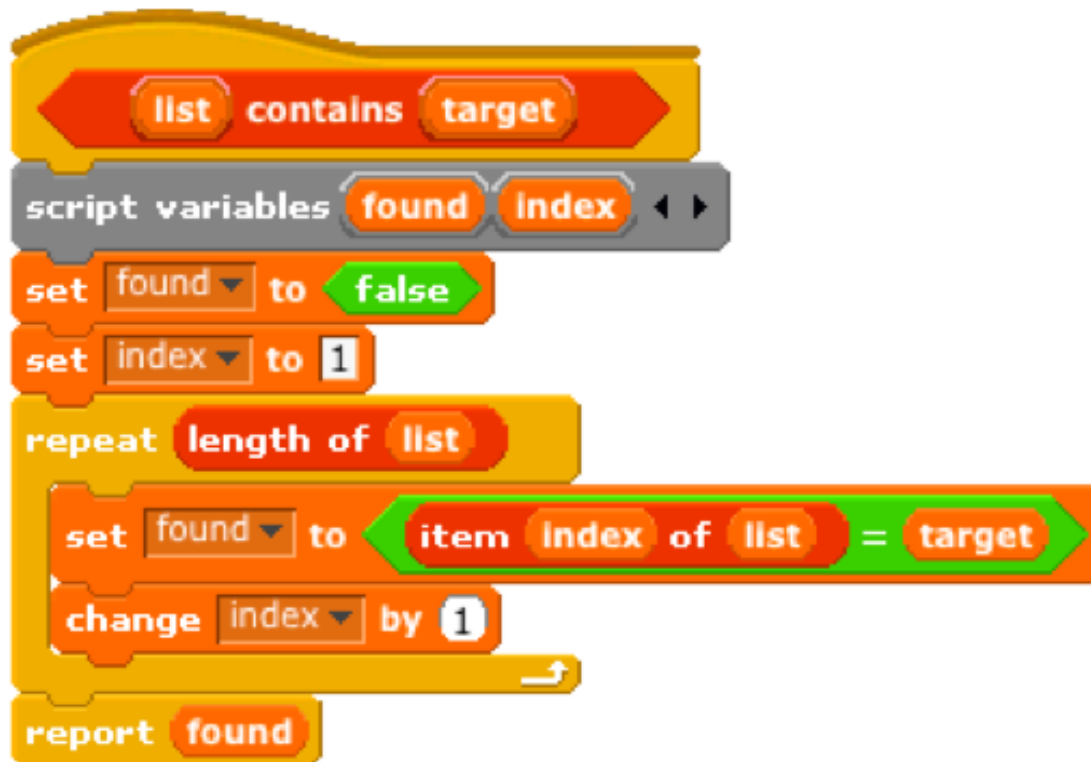


list: ['cat', 'dog', 'mouse'] target: 'mouse'

a) Give an example of values of **list** and **target** for which this code works correctly, despite the bug.

Debugging Part 2

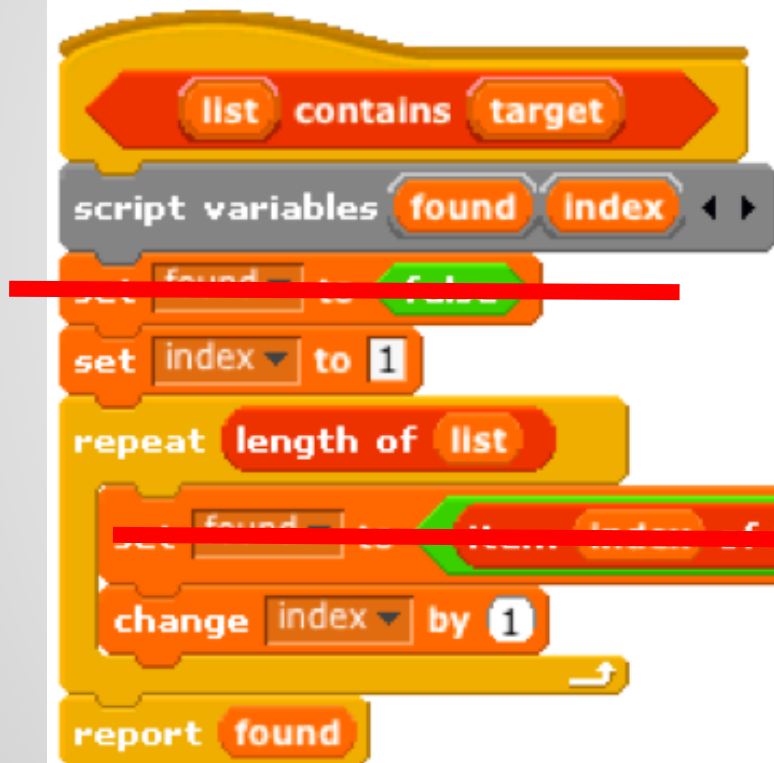
Question 8: We are trying to write a new predicate block that will return **true** when a particular value is present within a list. Unfortunately, there is a bug.



b) Describe what you would change so that the block will work correctly for all inputs.

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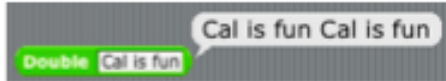

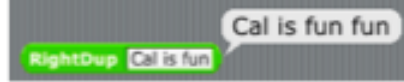

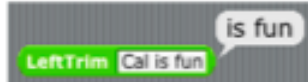


Replace the second crossed out line with this



b) Describe what you would change so that the block will work correctly for all inputs.

Float like a Butterfly, String Like a Bee*


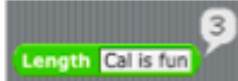

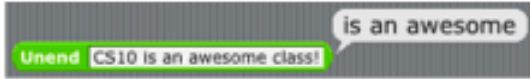
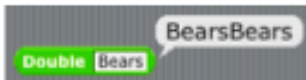
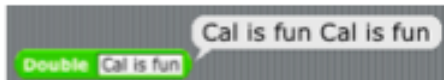
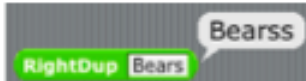

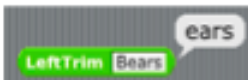
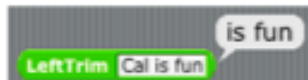
Block	Description	Word example	Sentence example
Length	Report the number of letters in a word / words in a sentence		
Unend	Remove the ends of a word / sentence.		
Double	Double a word / sentence		
RightDup	Duplicate the rightmost letter / word		
LeftTrim	Remove the first letter / word from the left		

a) _____ (I love cal)___ → 9

b) _____ (go bears and beat stanford)___ → dan

*Ok I promise about the "no more puns" this time.

Float like a Butterfly, String Like a Bee*

Block	Description	Word example	Sentence example
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a) Length(RightDup(Double(Unend (I love cal)___)___)___)___ → 9

b) LeftTrim(Unend(Double(Unend(Unend (go bears and beat stanford)___)___)___)___)___ → dan

*Ok I promise about the "no more puns" this time.