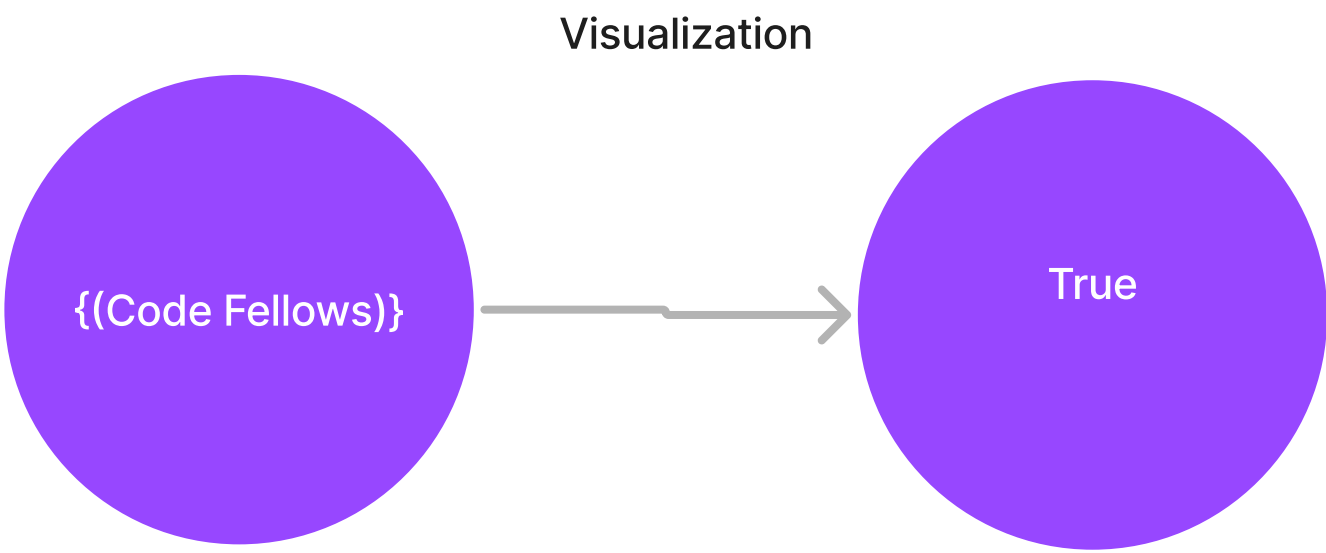## Problem Domain

- Write a function called validate brackets
- Arguments: string
- Return: boolean
  - representing whether or not the brackets in the string are balanced

There are 3 types of brackets:
- Round Brackets : ()
- Square Brackets : []
- Curly Brackets : {}

input
A string, ex (), {}()

output
True or False

Big O

big O. 1(n) time using a stack

big O O(n) returning only a boolean

Test

1. if string= '[]', return true

2. if string = (){ , return false

3. only open characters and no closed = [[, returns false

Step Through

string	'[(House]]
stack	[] empty
open	[(
closed	)]
stack	[(
loop closed for match	matches in stack
boolean	true

Visualization

{(Code Fellows)} → True

Code

```
1
2   open_list = ["[","{","("]
3   close_list = ["]","}",")"]
4
5   def check(myStr):
6       stack = []
7       for i in myStr:
8           if i in open_list:
9               stack.append(i)
10          elif i in close_list:
11              pos = close_list.index(i)
12              if ((len(stack) > 0) and
13                  (open_list[pos] ==
    stack[len(stack)-1])):
14                  stack.pop()
15              else:
16                  return False
17      if len(stack) == 0:
18          return True
19      else:
20          return False
```