## Activity 1: A rose by any other name

- Letters, numbers, and “_”
- No spaces or symbols
- No leading numbers
- Case sensitive

### Which of these are valid/invalid?
What do you think they represent?

<table>
<thead>
<tr>
<th>LetterCount</th>
<th>5thBody</th>
<th>this is fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX_SIZE</td>
<td>y</td>
<td>orIsThisFine?</td>
</tr>
<tr>
<td>print</td>
<td>Y</td>
<td>789</td>
</tr>
<tr>
<td>Print</td>
<td>the ugly baby</td>
<td>upper_limit</td>
</tr>
<tr>
<td>Table 1</td>
<td>extraPoint</td>
<td>python-is-fun</td>
</tr>
</tbody>
</table>
Activity 2: VarLibs

• Grab 3 sheets of paper and label them 1, 2 and 3
• Each person does a different slide
Activity 2: VarLibs

Sheet1 = noun
Activity 2: VarLibs

Say: “My, isn’t Sheet1 looking nice today?”
Activity 2: VarLibs

Sheet2 = singular noun
Activity 2: VarLibs

Say: “I like Sheet1 more than Sheet2.”
Activity 2: VarLibs

If Sheet1 is less than 4 letters long, say:
“Tomorrow we will go to the circus and Sheet1.”

Else, say:
“Tomorrow we will eat a Sheet1.”
Activity 2: VarLibs

Say: “Upstairs I have many plural form of sheet2”
Activity 2: VarLibs

Sheet1 = A *number less than 10*
Activity 2: VarLibs

Say the following Sheet1 times:
“Rubber Baby Buggy Bumpers.”
Activity 2: VarLibs

Sheet2 = A number less than 5
Activity 2: VarLibs

Do the following 2 things Sheet1 times:
  Say: “I Sheet2 the sandbox.”
  Sheet2 = Sheet2 + 1
Activity 2: VarLibs

Sheet3 = Sheet1 + Sheet2
Activity 2: VarLibs

Say: “I once ate Sheet3 pieces of pizza.”
Last Activity: 4 != “4”

• 4 is an integer, “4” is a string
• `str(4)` is the same as “4”
• `int(“4”)` is the same as 4
• 4 + 4 = 8
• “4” + “4” = “44”
• 4 * 4 = 16
• “4” * 4 = “4444”
• “4” * “4” = error
Last Activity: 4 != “4”

• Make the largest number you can using:
  – 4, 7, 10
  – +, *
  – You CANNOT use str(), int()

• $4 \times 7 \times 10 = 480$
Last Activity: 4 != "4"

- Make the largest number you can using:
  - "4", "7", "10"
  - +, *
    - You CANNOT use str(), int()
- "7" + "4" + "10" = "7410"
Make the largest number you can using:
- 7,4,10
- +, *
- You CAN use str(), int()

str(4) * ( 7 * 10 ) =
"444444444444444444444444444444444444
444444444444444444444444444444444444
444444444444444444444444444444444444"