

[04]

Lists and Data Structures

Working with more than one thing at once

THE PRESENTER



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Design & BIM

@JacobWSmall

SAFE HARBOUR

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AGENDA



01.15 Minute Presentation:Lists



Questions & Answers

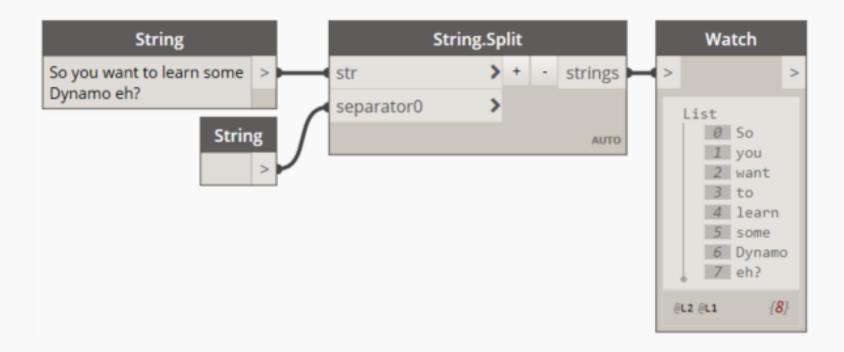
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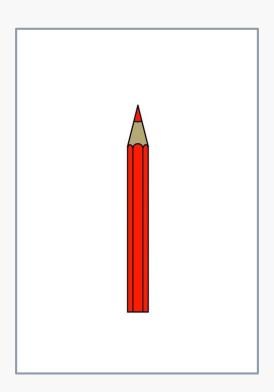


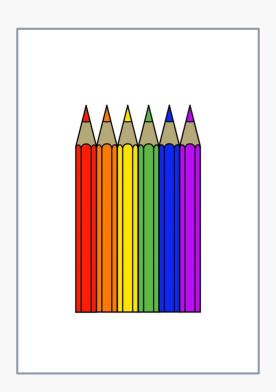
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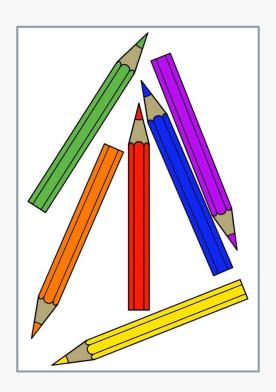
Bonus:

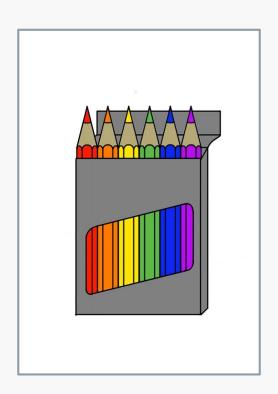
Lacing

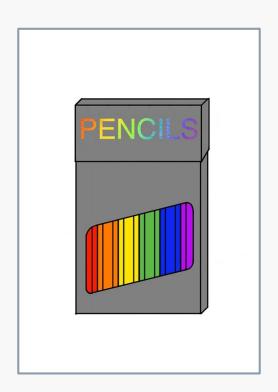


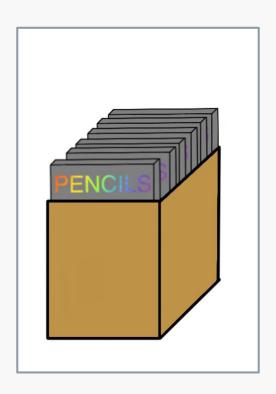


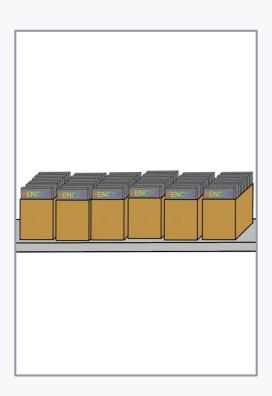


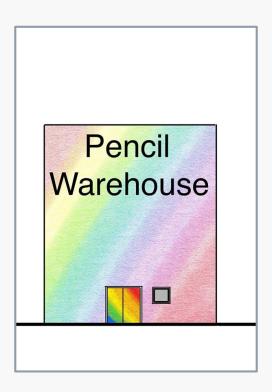




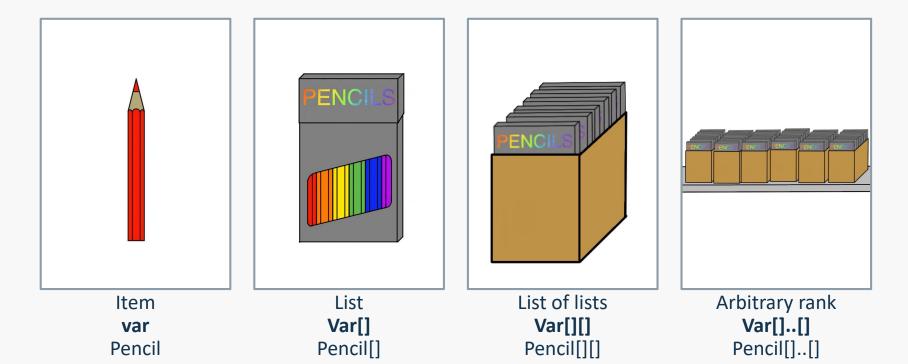




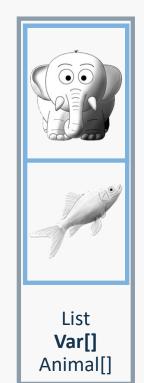


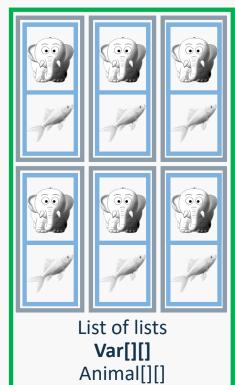


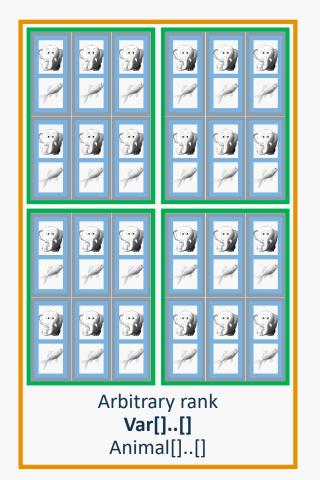










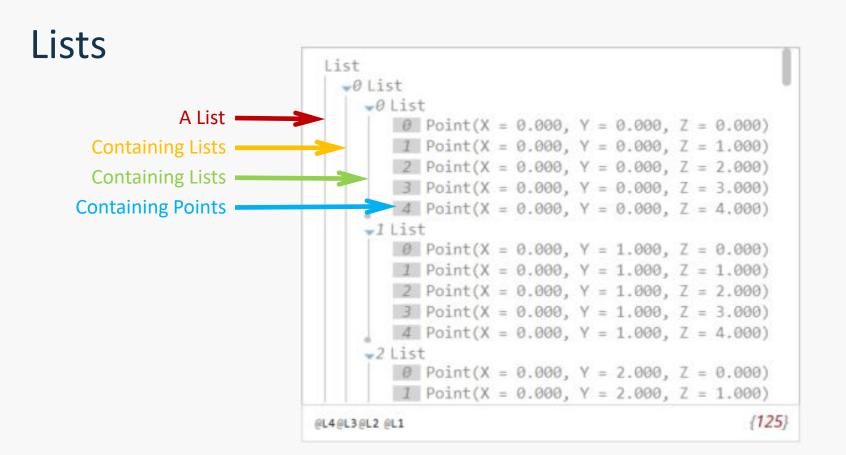


```
List
   -0 List
     -0 List
        Point(X = 0.000, Y = 0.000, Z = 0.000)
        Point(X = 0.000, Y = 0.000, Z = 1.000)
        2 Point(X = 0.000, Y = 0.000, Z = 2.000)
        3 Point(X = 0.000, Y = 0.000, Z = 3.000)
        4 Point(X = 0.000, Y = 0.000, Z = 4.000)
     -1 List
        Point(X = 0.000, Y = 1.000, Z = 0.000)
        Point(X = 0.000, Y = 1.000, Z = 1.000)
        2 Point(X = 0.000, Y = 1.000, Z = 2.000)
        3 Point(X = 0.000, Y = 1.000, Z = 3.000)
        4 Point(X = 0.000, Y = 1.000, Z = 4.000)
     -2 List
        \theta Point(X = 0.000, Y = 2.000, Z = 0.000)
        Point(X = 0.000, Y = 2.000, Z = 1.000)
                                               (125)
@L4@L3@L2 @L1
```

```
List
    0 List
      Point(X = 0.000, Y = 0.000, Z = 0.000)
        Point(X = 0.000, Y = 0.000, Z = 1.000)
        2 Point(X = 0.000, Y = 0.000, Z = 2.000)
        3 Point(X = 0.000, Y = 0.000, Z = 3.000)
        4 Point(X = 0.000, Y = 0.000, Z = 4.000)
     -1 List
        Point(X = 0.000, Y = 1.000, Z = 0.000)
        Point(X = 0.000, Y = 1.000, Z = 1.000)
        2 Point(X = 0.000, Y = 1.000, Z = 2.000)
        3 Point(X = 0.000, Y = 1.000, Z = 3.000)
        4 Point(X = 0.000, Y = 1.000, Z = 4.000)
     -2 List
        \theta Point(X = 0.000, Y = 2.000, Z = 0.000)
        Point(X = 0.000, Y = 2.000, Z = 1.000)
                                              (125)
@L4@L3@L2 @L1
```

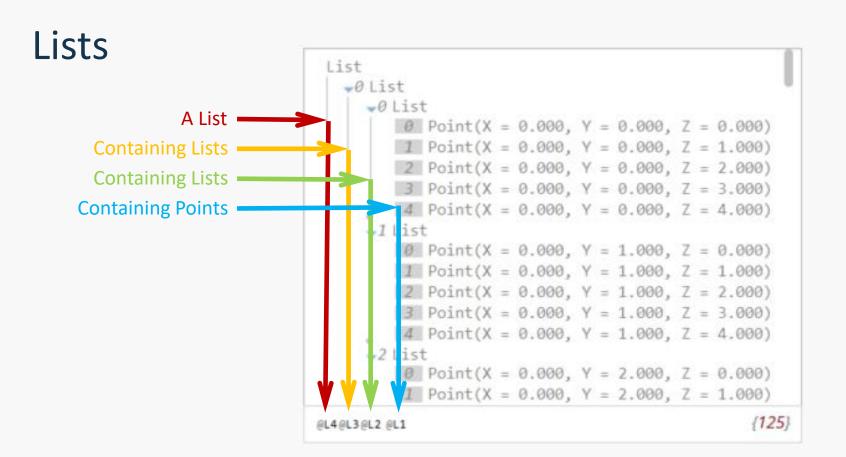
19

```
List
   -0 List
     -0 List
        Point(X = 0.000, Y = 0.000, Z = 0.000)
        Point(X = 0.000, Y = 0.000, Z = 1.000)
        2 Point(X = 0.000, Y = 0.000, Z = 2.000)
        3 Point(X = 0.000, Y = 0.000, Z = 3.000)
        4 Point(X = 0.000, Y = 0.000, Z = 4.000)
     -1 List
        Point(X = 0.000, Y = 1.000, Z = 0.000)
        Point(X = 0.000, Y = 1.000, Z = 1.000)
        2 Point(X = 0.000, Y = 1.000, Z = 2.000)
        3 Point(X = 0.000, Y = 1.000, Z = 3.000)
        4 Point(X = 0.000, Y = 1.000, Z = 4.000)
     -2 List
        \theta Point(X = 0.000, Y = 2.000, Z = 0.000)
        Point(X = 0.000, Y = 2.000, Z = 1.000)
                                               (125)
@L4@L3@L2 @L1
```



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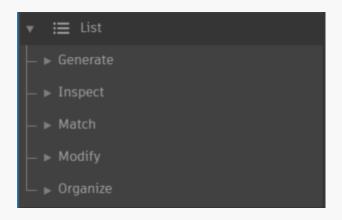


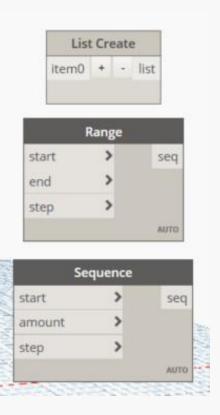
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Working with Lists

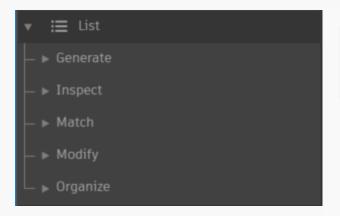
Create

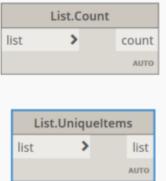




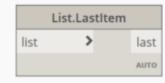
Working with Lists

Useful nodes







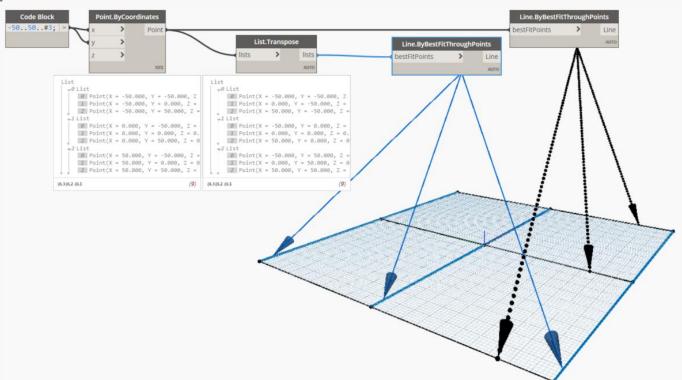




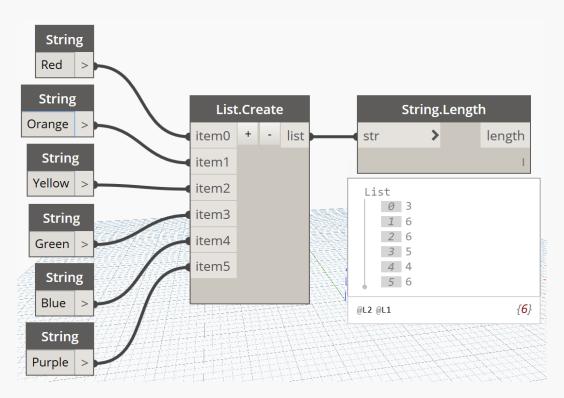


Working with Lists

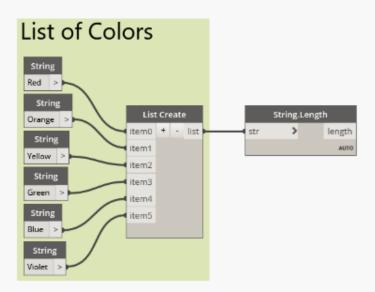
Transpose



Functions on Lists



Demo!



LEARNING RESOURCES

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Dynamo Info / News

- Main: http://dynamobim.org/
- · Blog: https://dynamobim.org/blog/
- Dynamo Builds: http://dynamobuilds.com/
- Dynamo GitHub: https://github.com/DynamoDS/Dynamo

Dynamo Learning

- Dynamo Primer: http://primer.dynamobim.org
- Dynamo Forums: https://forum.dynamobim.com/
- Dynamo Dictionary: https://dictionary.dynamobim.com
- Dynamo Nodes: https://dynamonodes.com/

Design Script:

- Design Script Language Summary: http://designscript.io/DesignScript_user_manual_0.1.pdf
- Design Script Language Guide: https://dynamobim.org/wp-content/links/DesignScriptGuide.pdf
- Design Script Presentation: https://github.com/Amoursol/dynamoDesignScript

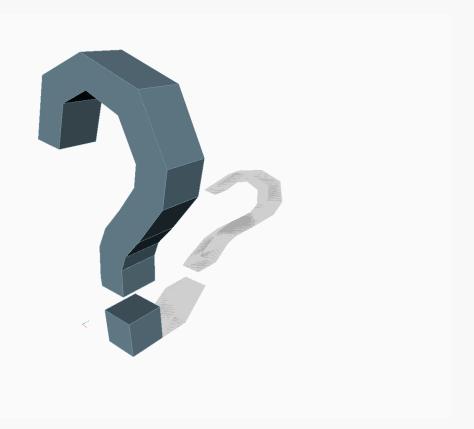
Dynamo Python:

- Python for Dynamo AU Lab Handout 1: https://docs.google.com/document/d/1_ms_ZyyKoaWbWbcio3CN5qT
 I2Ywq4OJep3SIsWOXXuI/edit#heading=h.76xq4kaz9plc
- Python for Dyanmo AU Lab Handout 2: https://github.com/Amoursol/dynamoPython/blob/master/images/DivingDeeper ABeginnersLookAtPythonInDynamo AU London2018.pdf
- Python for Dynamo examples: https://github.com/Amoursol/dynamoPython

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Questions?





Make anything...

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