

Intro To Python: Questions and Exercises

1) How many bits in a byte?

2) Do the following number conversions between binary, hexadecimal and decimal:

Convert this binary number to decimal: 1101

Convert this decimal number to binary: 37

Convert this hexadecimal number to decimal: FF

Convert this decimal number to hexadecimal: 120

3) Why should interactive GUI scripts also be executable from the command line?

4) Why should scripts containing functions and/or classes that are imported as modules also be executable from `__main__` scope?

5) Describe the Maya reload function and why it is used?

6) Python Exercise:

Using python lists and strings, demonstrate the difference between mutable and immutable data types.

7) Maya Python Exercise:

Create a function that builds a list of tuples containing keyframe, value pairs from input node attribute.

Extra points for creating a function with node as input that first queries that node for keyed attributes, and then builds the list of tuples as described above. Function should return a dictionary with dictionary keys equal to node.attribute string.