**Autodesk Advanced Maya Python**

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**DEMO 1: PDB Debugger in Python Interpreter**

Shows you how to use the debugger with Python modules in a standard Python interpreter

**In Command Line Interpreter:**

>>>import dist

>>>import pdb

>>>pdb.run(“dist.distance((3,4), (5,7))”)

>>> hit ‘s’ for step into, then hit ‘n’ for next, then ’n’, etc…

**DEMO 2: PDB Debugger in Maya Script Editor**

Shows you how to use the debugger with Python modules inside Maya

**In Maya Script Editor:**

>>>import dist

>>>import pdb

>>>pdb.run(“dist.distance((3,4), (5,7))”)

>>> in the popup window hit ‘s’ for step into, then hit ‘n’ for next, then ’n’, etc…

*Comments:* Not the nicest but works like demo 1

**DEMO 3: PDB Debugger in Maya Script Editor, overwriting stdin**

Shows you how to write your own run command so that you can change the GUI and you do this by overwriting stdin, and have buttons.

**In Maya Script Editor:**

>>>##Don’t need to import dist again, same Maya session

>>>import guipdb1

>>> guipdb1.run(“dist.distance((3,4), (5,7))”)

>>> click the step into and next button now.

*Comments:* Here you are overriding the run command of pdb, and to do so you need to write you own two functions:

1. Readline()
2. Read()

**DEMO 4: PDB Debugger in Maya Script Editor, overwriting stdout**

Shows you how to write your own run command so that you can change the output to the script editor and you do this by overwriting stdout. We have now removed the (pdb) prompts from the script editor.

**In Maya Script Editor:**

>>>>>>##Don’t need to import dist again, same Maya session

>>> import guipdb

>>> guipdb.run(“dist.distance((3,4), (5,7))”)

>>> click the step into and next button now.

*Comments:* Here you are overriding the run command of pdb, and to do so you need to write you own three functions:

1. writelines()
2. write()
3. flush

Much cleaner output.

**DEMO 5: Data Transfer Using cPickle**

**In Command Line Interpreter:**

>>>import ShotServer

>>> ShotServer.startServer()

**In Maya Script Editor:**

>>> import ShotServer

>>> shot = ShotServer.makeSampleShot()

>>> ShotServer.dumpShot(shot)

>>>shot = ShotServer.requestNewShot(shot)

>>>ShotServer.dumpShot(shot)

>>>ShotServer.stopServer()