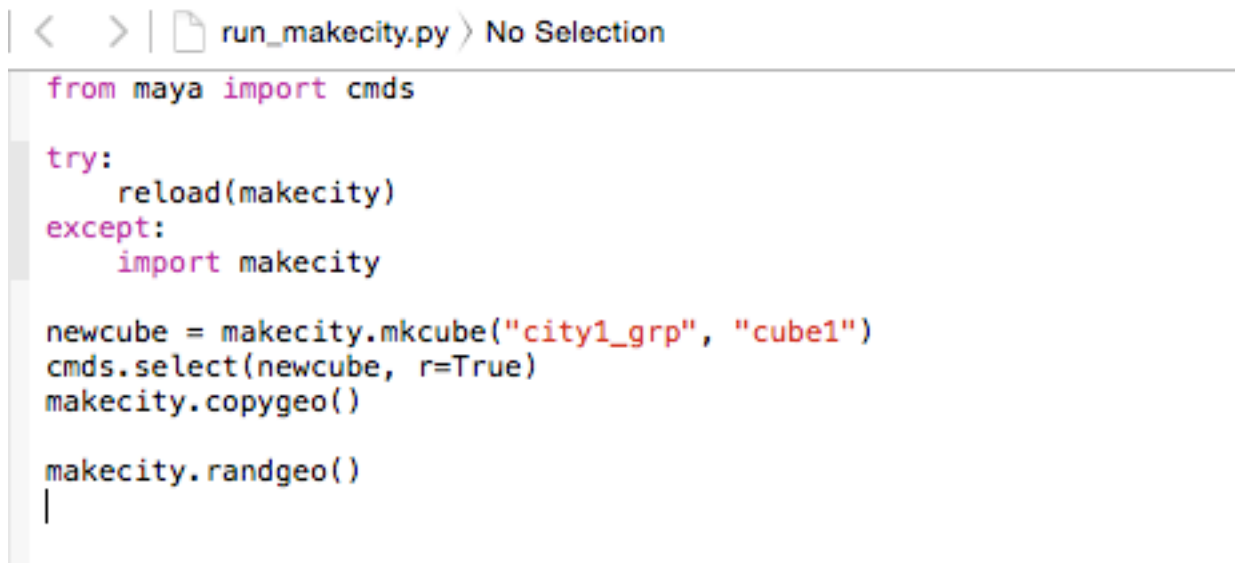



Description of Maya Python script: makecity.py

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These are the commands run from Custom shelf button:



```
| < > |  run_makecity.py > No Selection
```

```
from maya import cmds

try:
    reload(makecity)
except:
    import makecity

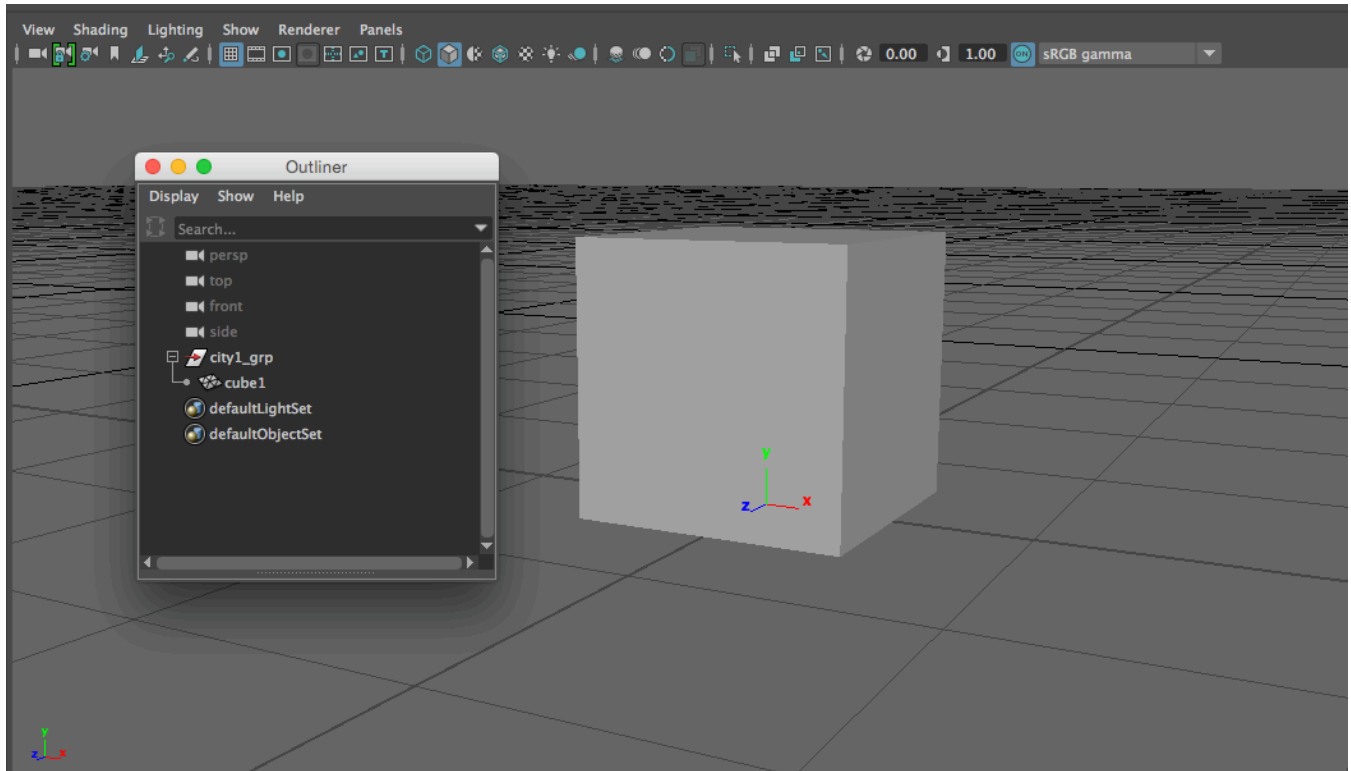
newcube = makecity.mkcube("city1_grp", "cube1")
cmds.select(newcube, r=True)
makecity.copygeo()

makecity.randgeo()
|
```

The functions contained in module, makecity, should be considered a first pass “hacky” prototype. The intent is to provide exercise examples for students learning Maya Python scripting. It should be noted that resulting Maya geometry can also be achieved using nParticle Instancer. Herein are suggested improvements to this script.

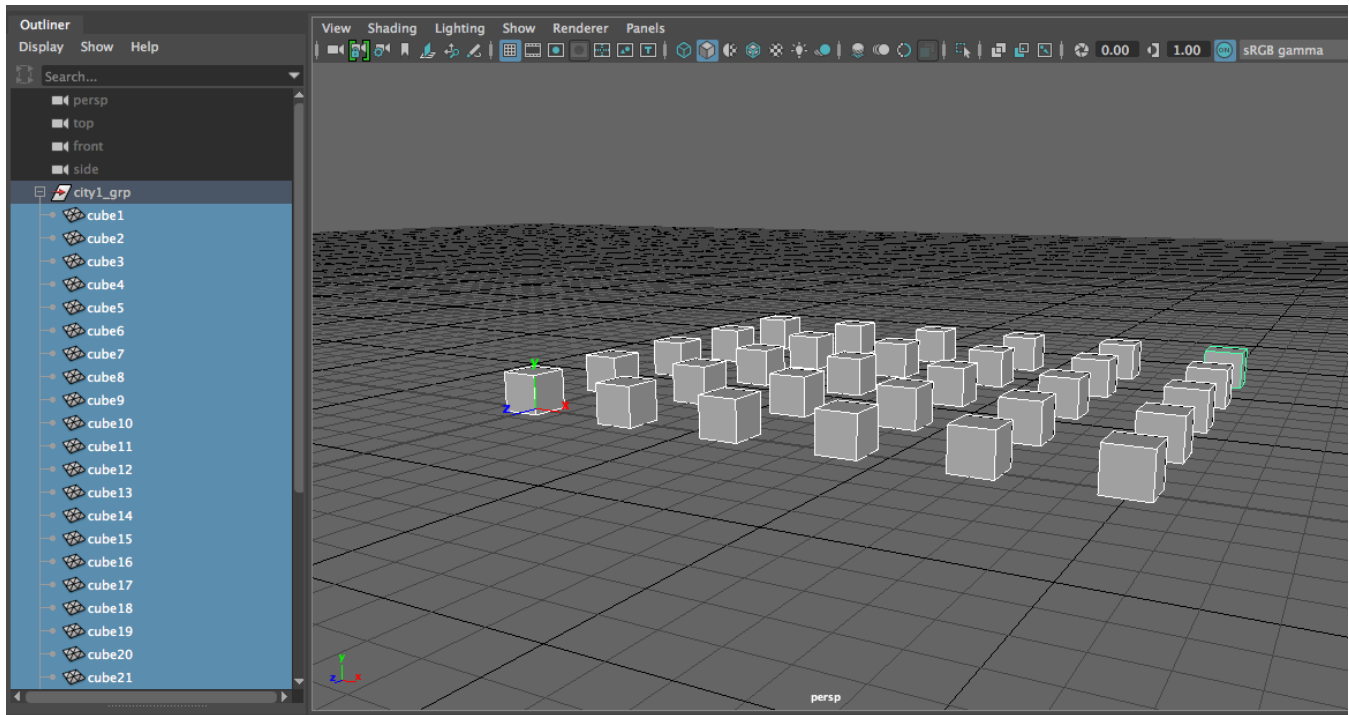
makecity.mkcube

- change code to use “xform” command instead
- objective is that base of cube and it's scale and rotate pivots are at the origin



makecity.copygeo

- return “allgeo” list so that subsequent code isn’t required to depend on current selection and can instead pass list as an argument into other functions
- create a similar function that copies geometry to CVs of another input geometry



makecity.randgeo

- add default input parameters to function with default values for input geo and random ranges
- add option to randomize rotation as well
- add feature or create alternate function that can randomize animation using noise expressions
- begin with call to random seed function so that generated random values can be repeatable

