Assignment - Maya Nodes Part 1

Topics Covered

- Build Maya Custom Node with MPxNode

simpleNode Plug-in

- **Topics Covered**
    - Write a skeleton of a custom node "simpleNode" with MPxNode class from scratch
    - Add simple attribute using MFnNumericAttribute class
- **Overview**
    - In this exercise, we will implement a custom node simpleNode, it has two attributes: "input", "output"
    Whenever the "input" attribute changes value, the "output" attribute will always be the "input" attribute value multiplied by 2.
- **Exercises**
    - Go to "simpleNode python Plug-in\Exercise" folder, open simpleNode.py, the skeleton of the command is already there.
    - In simpleNode.py, adding declaration of "output" attributes and also declare your unique node ID
    - In simpleNode.py, implement functions that are declared in simpleNode.py. Relevant classes and methods:
            MFnNumericAttribute::create()
            MPxNode::attributeAffects(), MPxNode::addAttribute()
            MDataBlock::outputValue(), MDataBlock::setClean()
            MDataHandle::set()
    - In simpleNode.py, implement both initializePlugin() and uninitializePlugin() functions to handle registration and de-registration of the simpleNode node. Relevant classes and methods:
            MFnPlugin:: registerNode()
            MFnPlugin:: deregisterNode()
- **Result**
        In script editor, execute:

createNode simpleNode;
Open "Attribute Editor", you will see there are two attributes listed, "input",
"output". If you change "input" value, "output" value will be 2* input.