Project 2

William Crutchfield

COMPUTER GRAPHICS - CMSC 405

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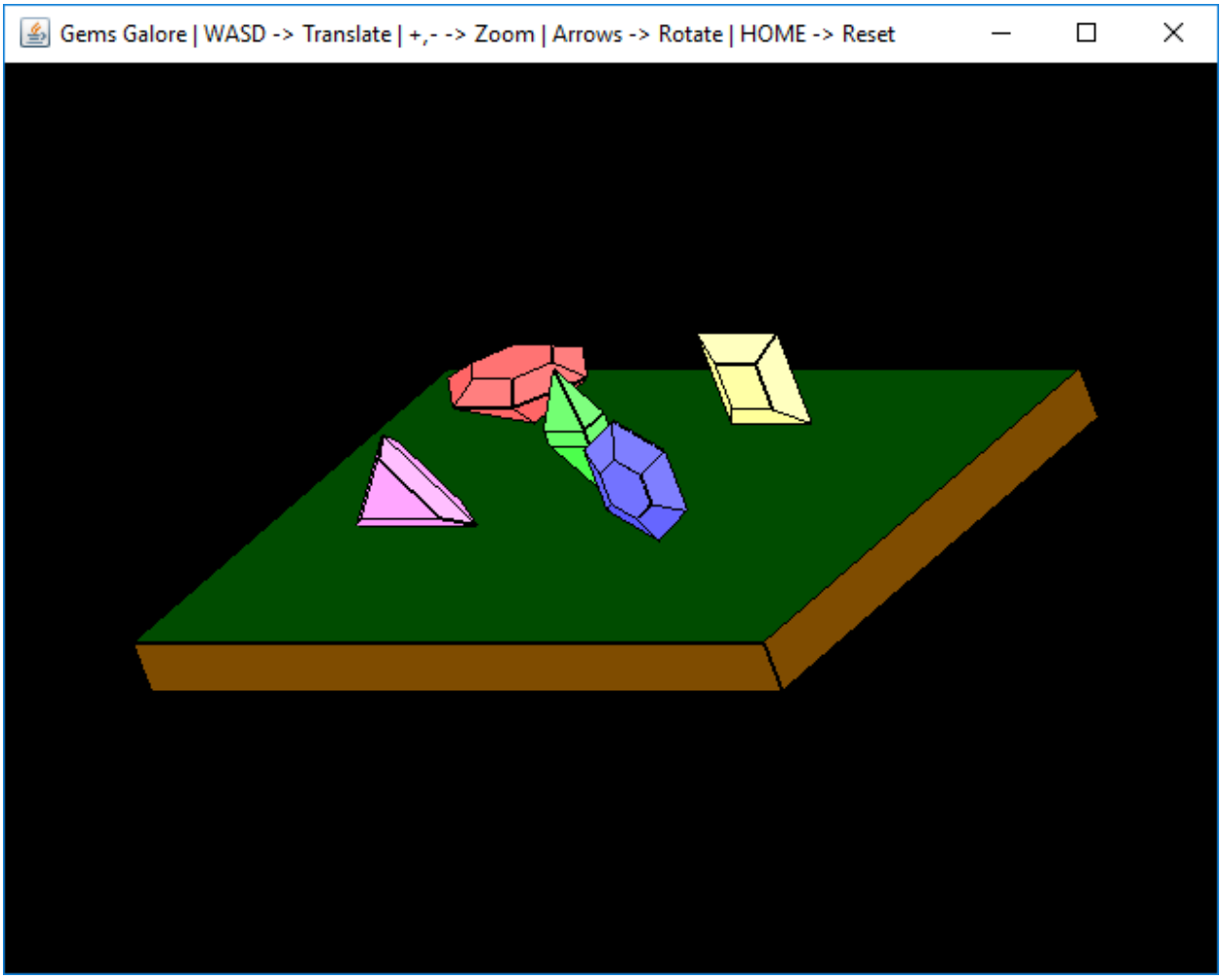
Contents

Test Cases

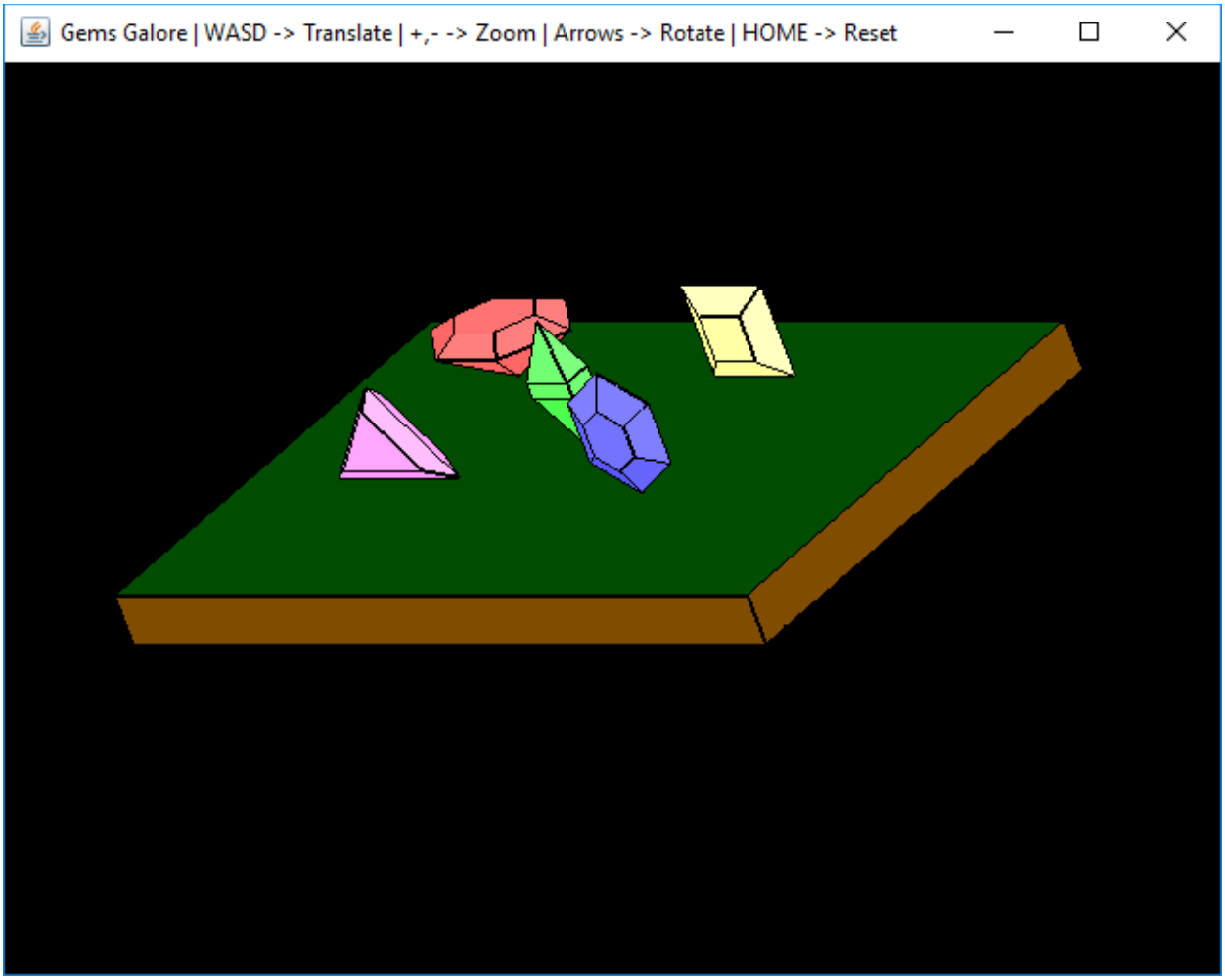
Aspect Tested	Input	Expected Output	Actual Output	Test Outcome
Translate Y += .1	W	Translated +.1 Y	Translated +.1 Y	Passed
Translate X -= .1	A	Translated -.1 X	Translated -.1 X	Passed
Translate Y -= .1	S	Translated -.1 Y	Translated -.1 Y	Passed
Translate X += .1	D	Translated +.1 X	Translated +.1 X	Passed
Rotate X += 15	Up Arrow	Rotated X += 15	Rotated X += 15	Passed
Rotate Y -= 15	Left Arrow	Rotated Y -= 15	Rotated Y -= 15	Passed
Rotate X -= 15	Down Arrow	Rotated X -= 15	Rotated X -= 15	Passed
Rotate Y += 15	Right Arrow	Rotated Y += 15	Rotated Y += 15	Passed
Scale -= .1	Minus	Scale -= .1	Scale -= .1	Passed
Scale += .1	Plus	Scale += .1	Scale += .1	Passed
Reset Transitions	Home	Rotate X = 30 Rotate Y = -30 Rotate Z, Translate X, Translate Y, Translate Z = 0 Scale = 1.2	Rotate X = 30 Rotate Y = -30 Rotate Z, Translate X, Translate Y, Translate Z = 0 Scale = 1.2	Passed

Final Product

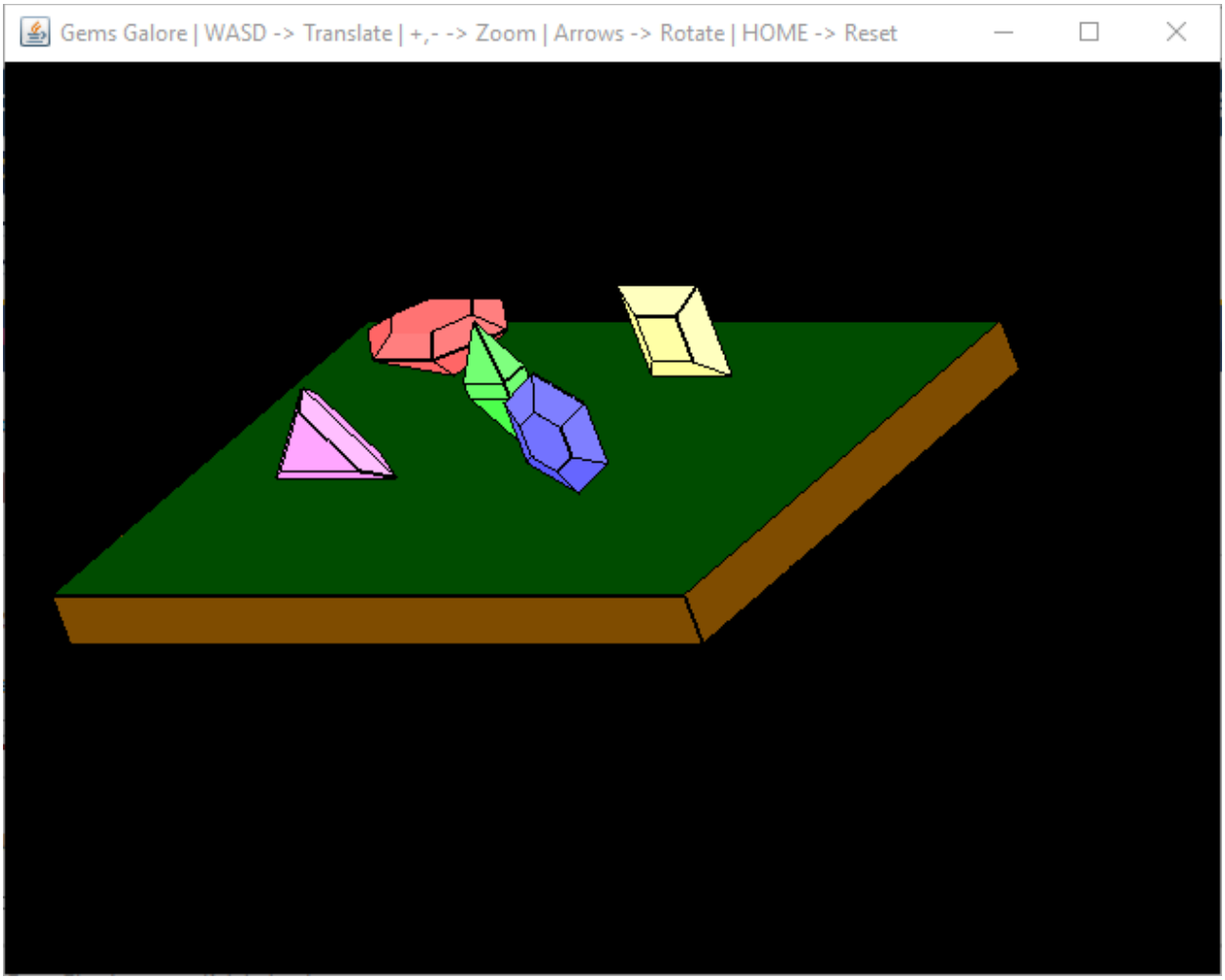
Upon starting the program, a window will open that looks like this. I have created a simple scene that of multiple colored gems hovering above the ground.



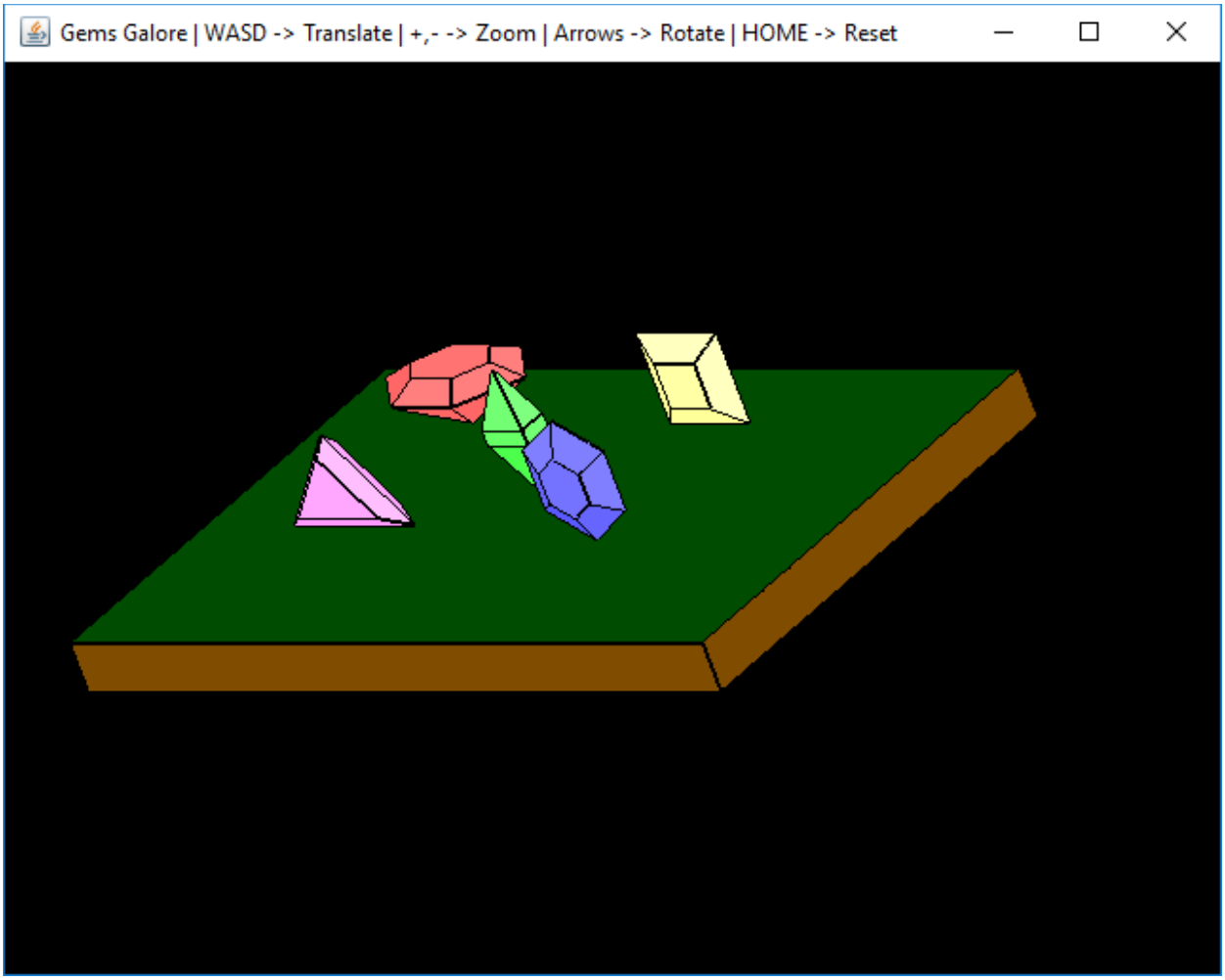
Then, if we press the “W” Key, the scene will translate +.1 along the Y axis.



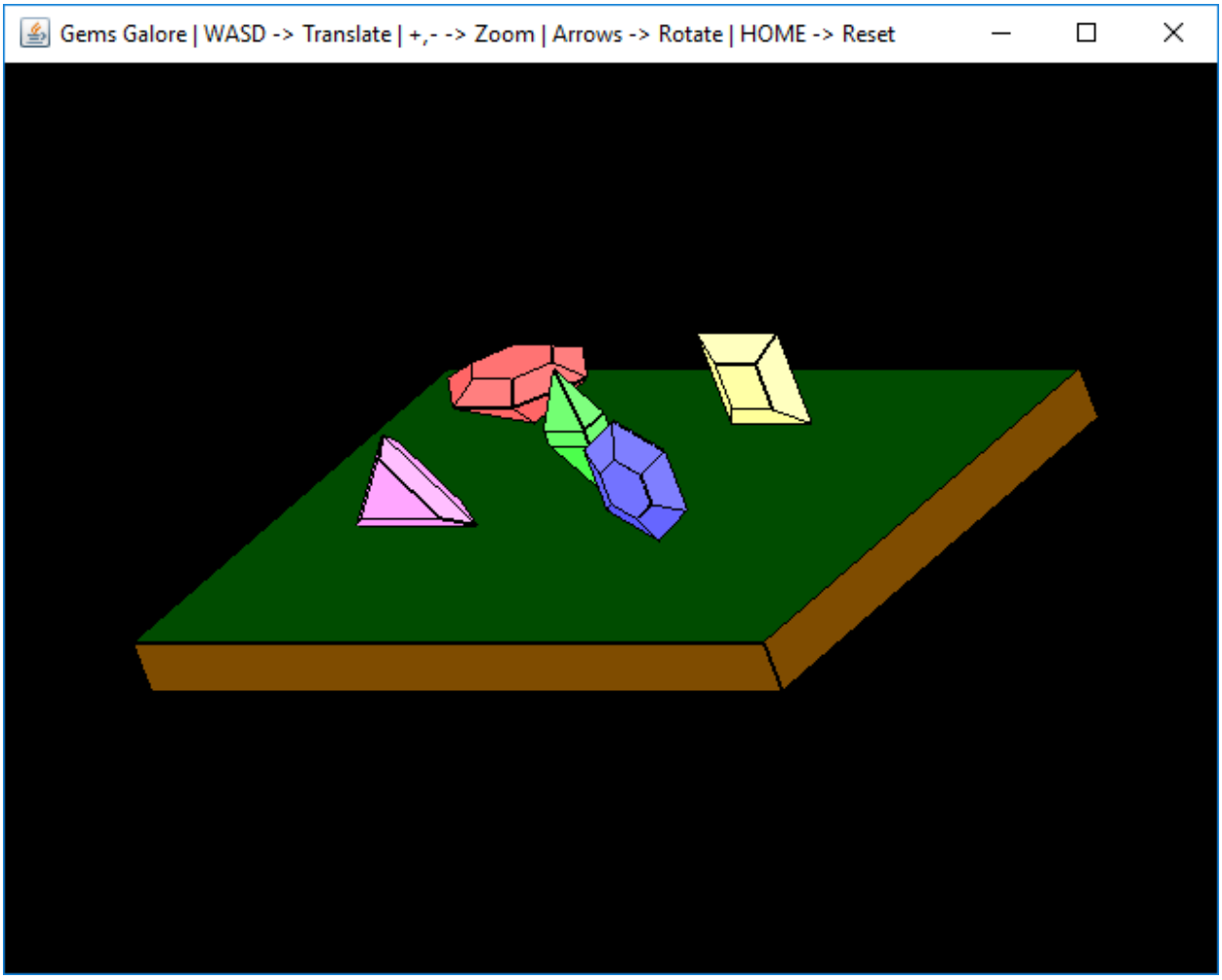
Then, if we press the “A” Key, the scene will translate -.1 along the X axis.



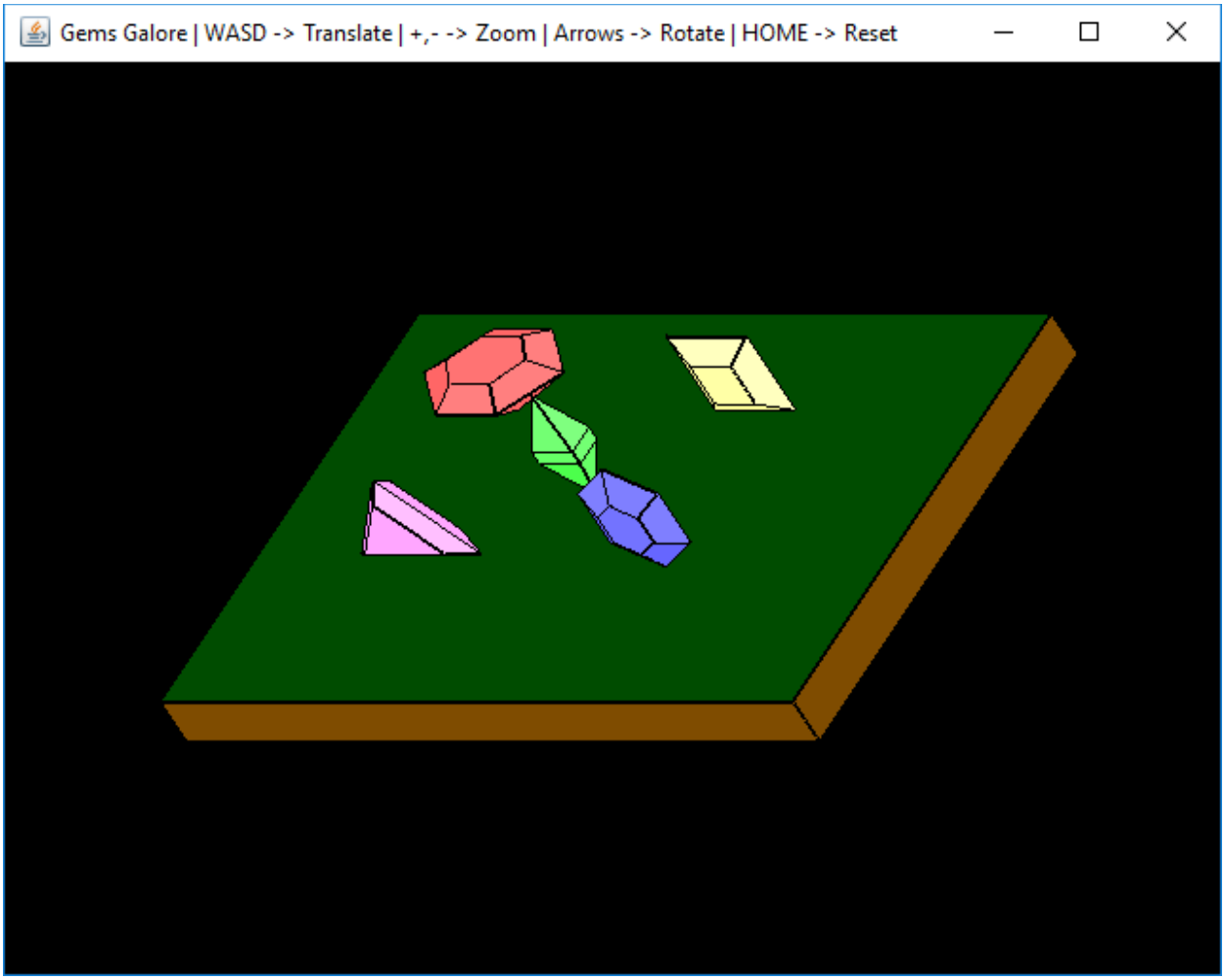
Next, if we press the “S” Key, the scene will translate -.1 along the Y axis.



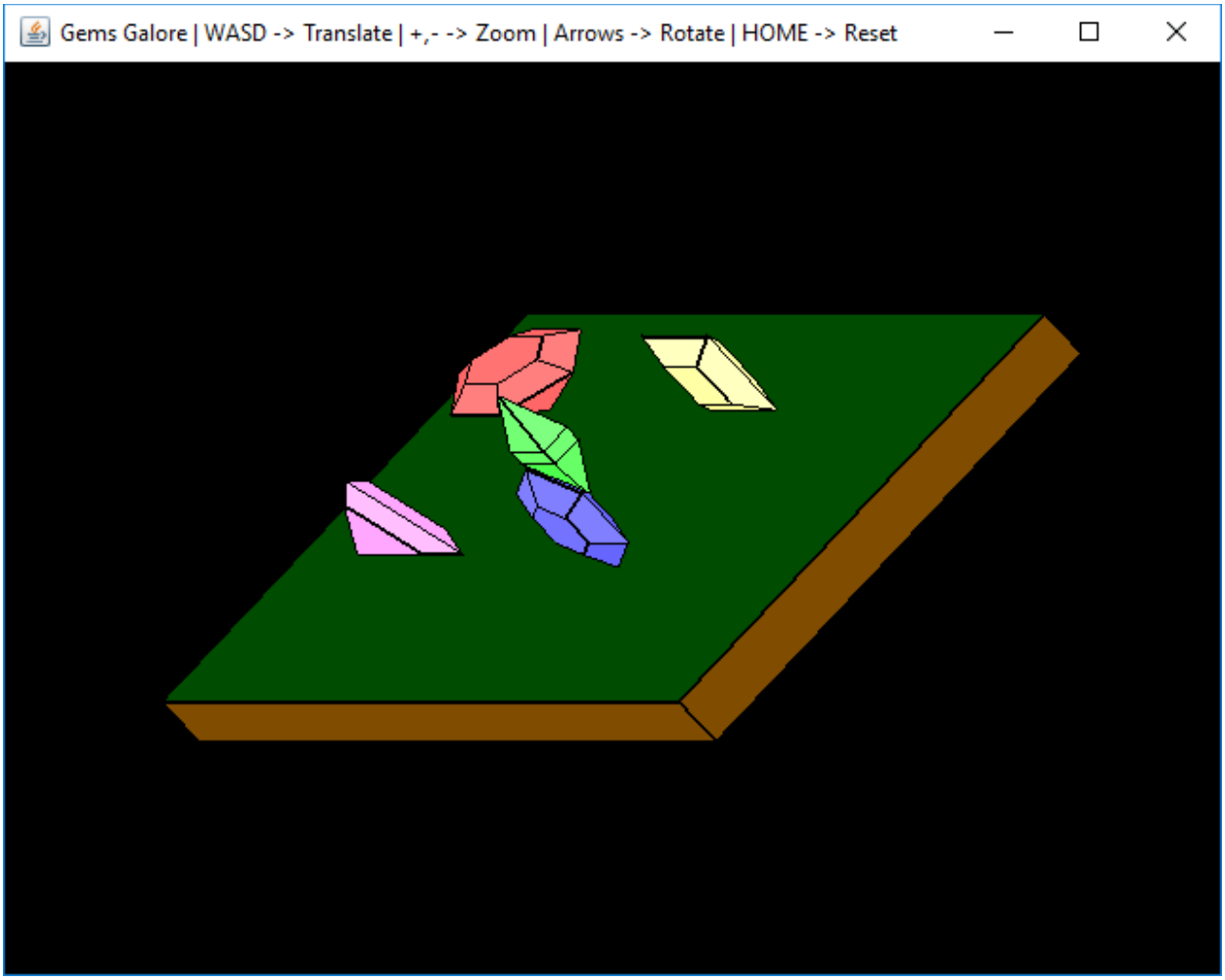
Then, if we press the “D” Key, the scene will translate +.1 along the X axis. Thus, returning to the position the scene started in.



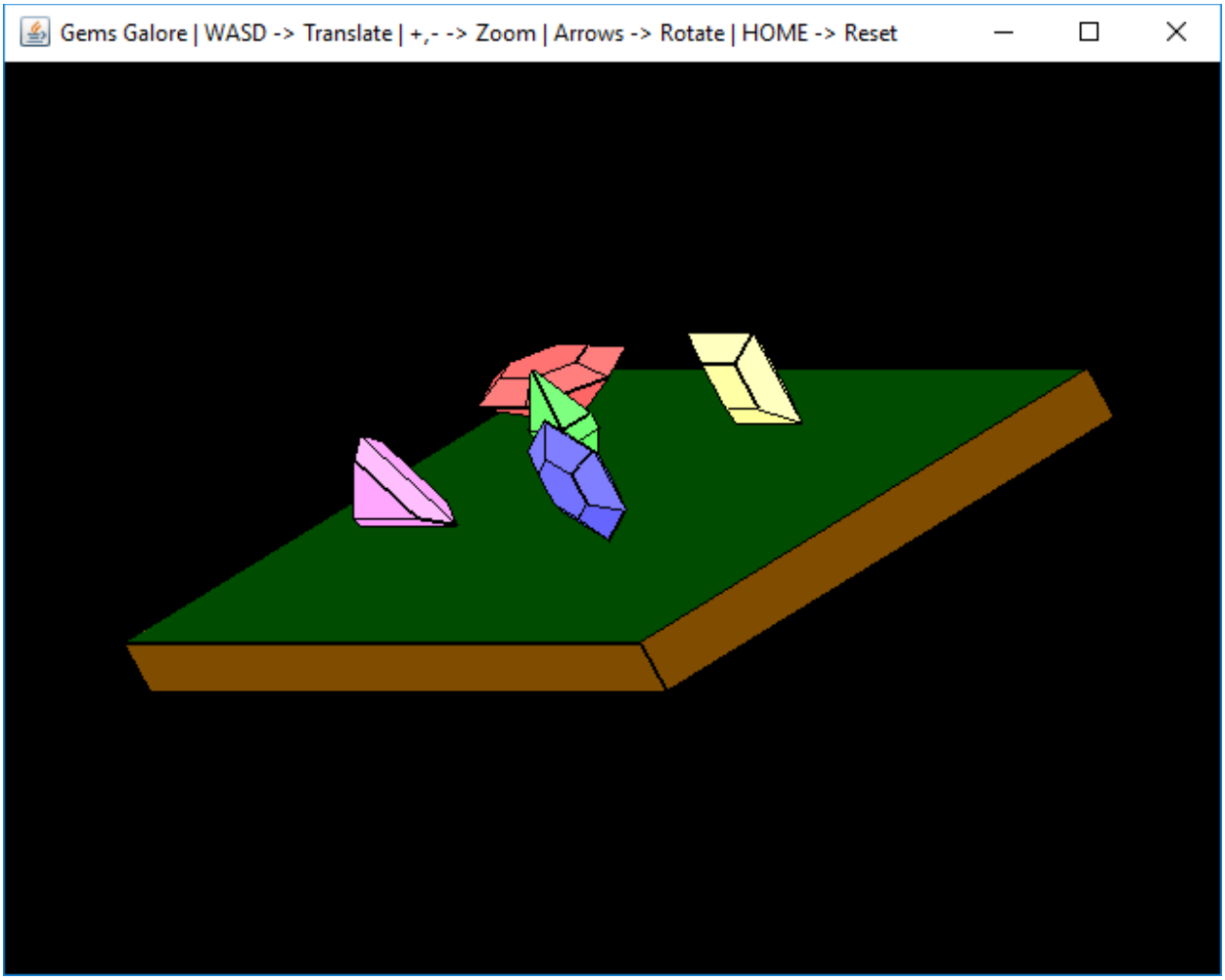
Next, if we press the “Up Arrow” Key, the scene will rotate +15 along the X axis.



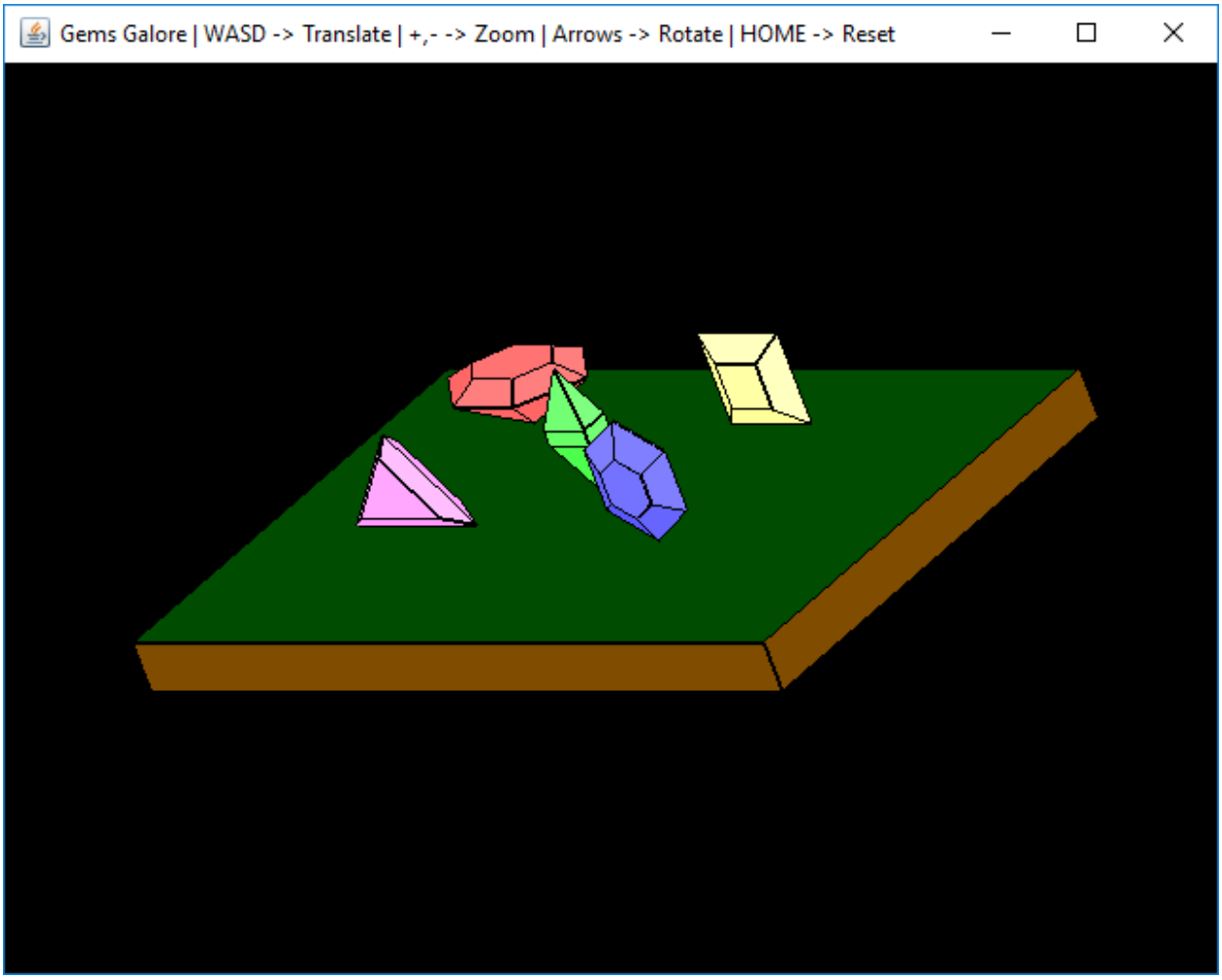
Then, if we press the “Left Arrow” Key, the scene will rotate -15 along the Y axis.



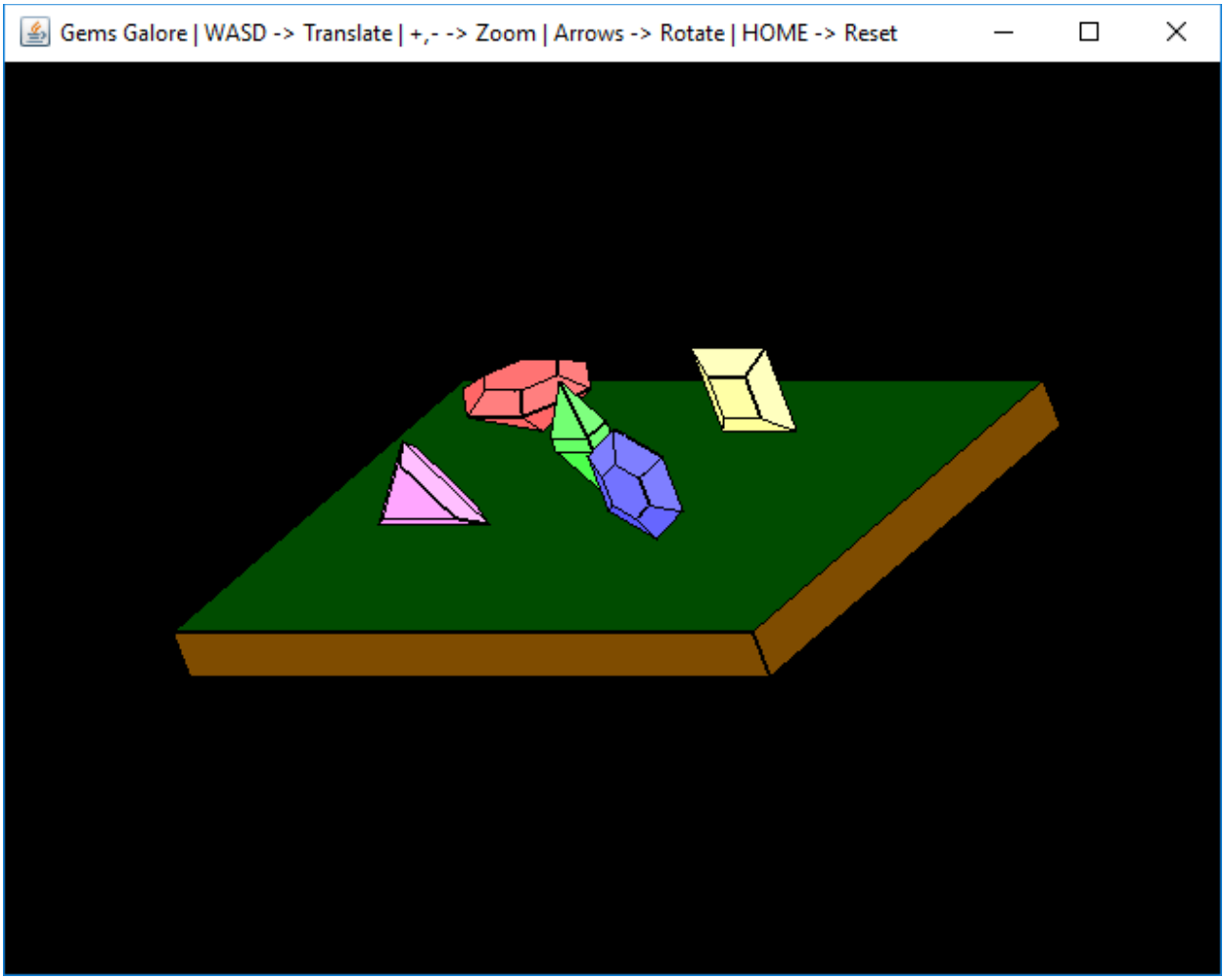
Then, if we press the “Down Arrow” Key, the scene will rotate -15 along the X axis.



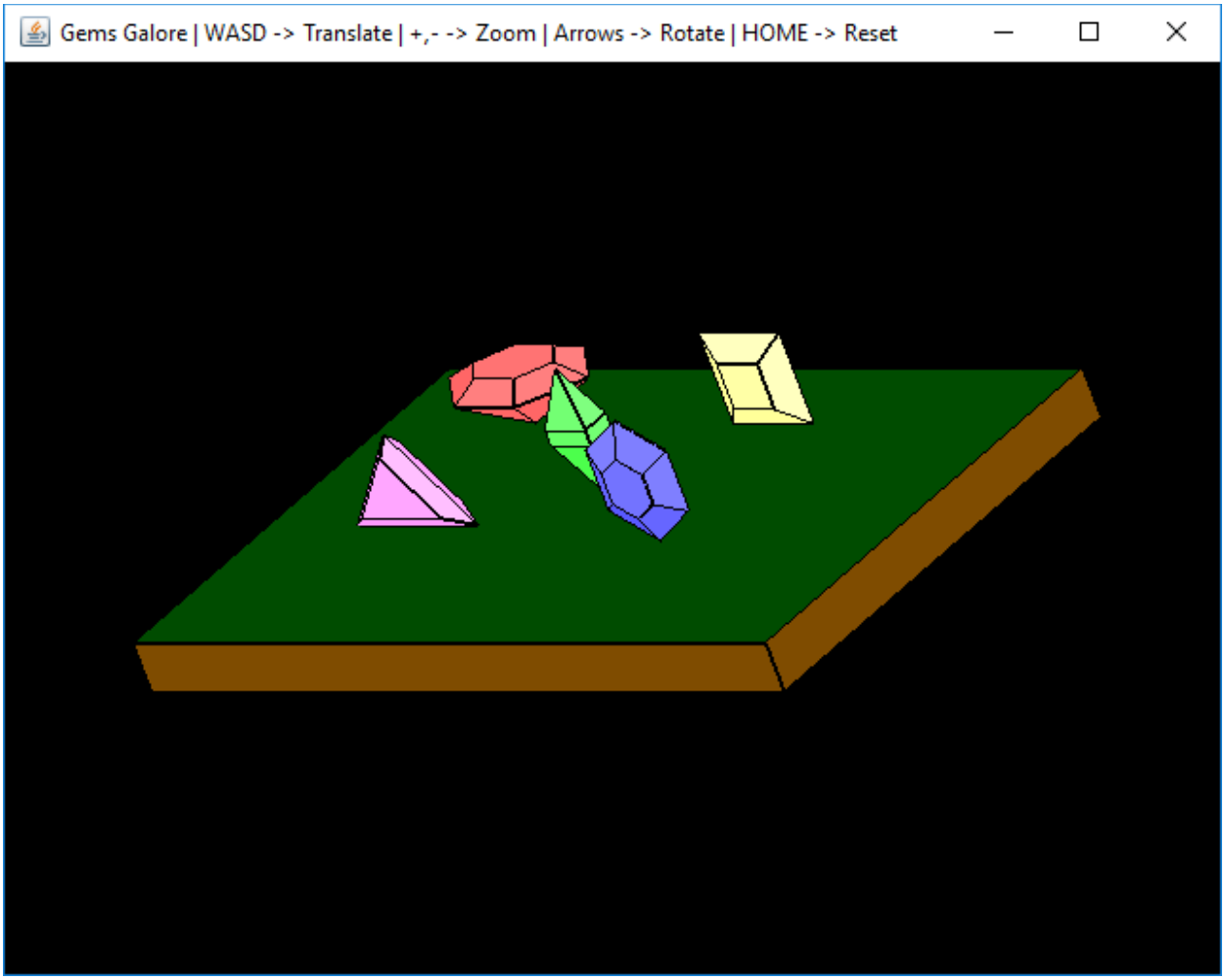
Next, if we press the “Right Arrow” Key, the scene will rotate +15 along the Y axis. Thus, returning to the rotation the scene started in.



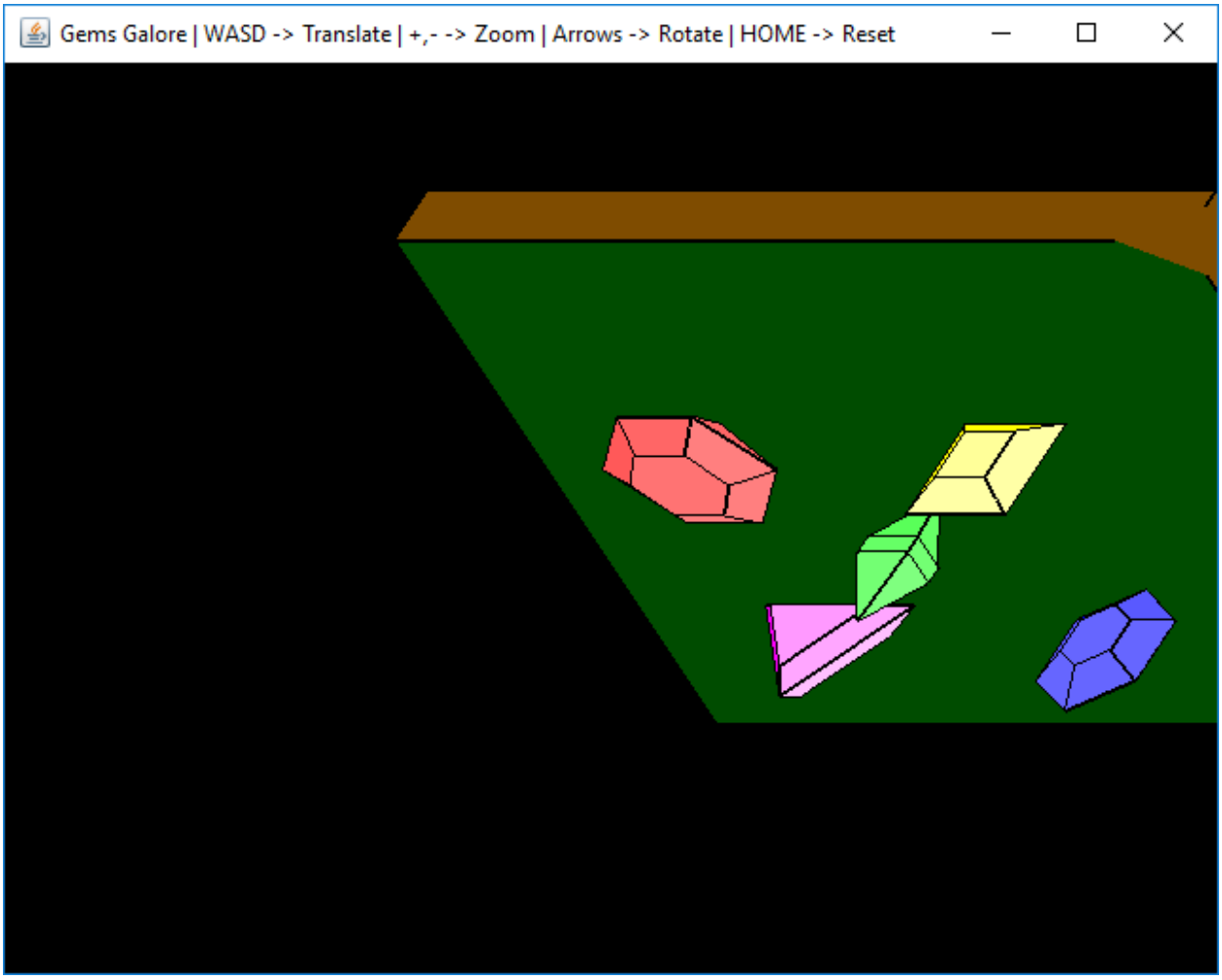
Then, if we press the “Minus” Key, the scene will scale -.1.



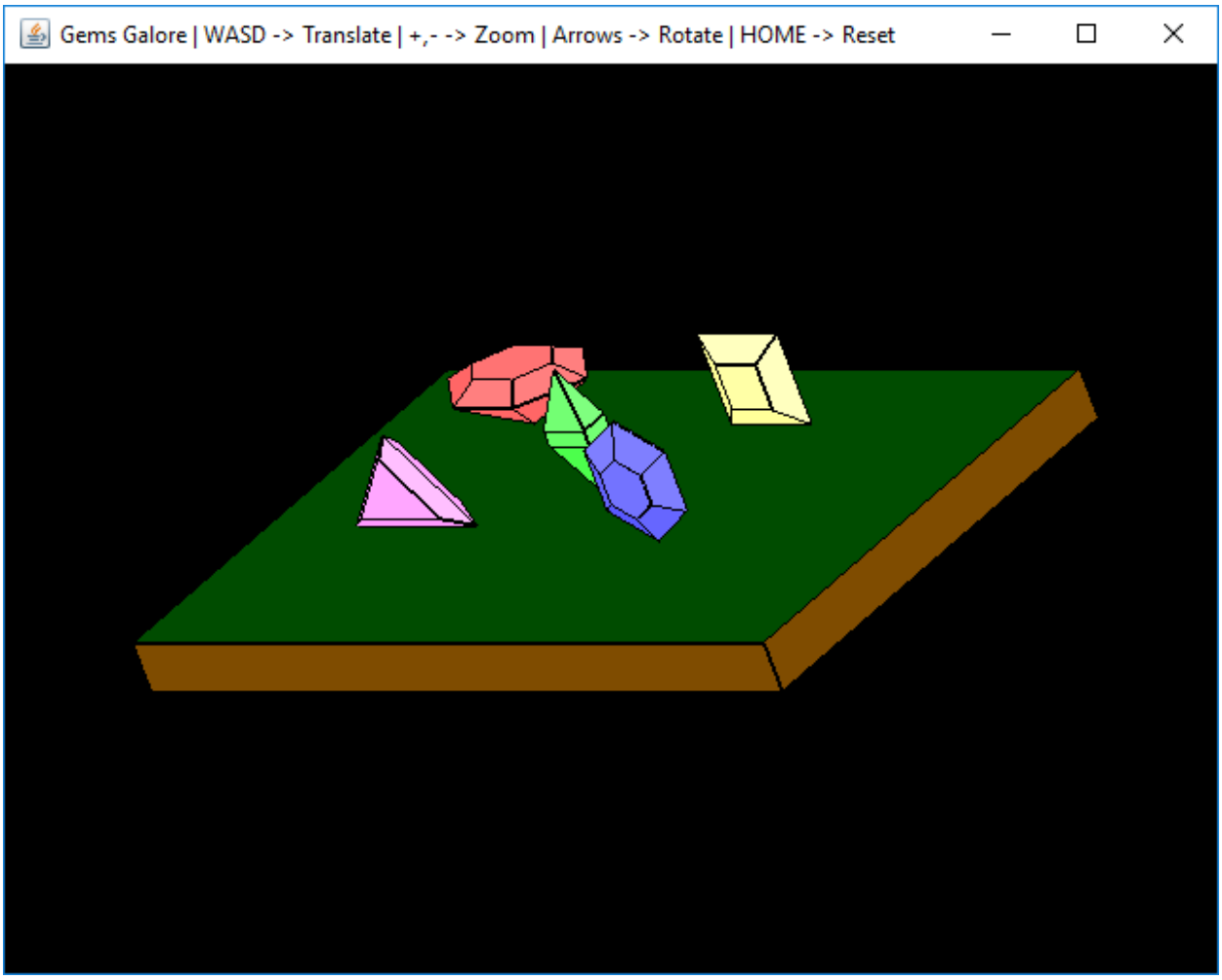
Then, if we press the “Plus” Key, the scene will scale +.1. Thus, returning to the starting scale.



Lastly, if you happen to transition the scene into a position that you do not like, such as the example below, there is an easy way to reset what you have done.



Simply press the “Home” Key, and the scene will reset back to the defaults, shown below.


Gems Galore | WASD -> Translate | +,- -> Zoom | Arrows -> Rotate | HOME -> Reset