global string $gMainProgressBar;
progressBar -e -bp -ii 1 -st "Preparing for UV Layout Adaptation..." $gMainProgressBar;

//store the currently selected Object;
string $thisSelection[] = `ls -sl`;
string $thisObject = $thisSelection[0];

// convert to UVs
ConvertSelectionToUVs;

//convert to Shell Border
polySelectConstraint -t 0x0010 -w 1 -m 2;

// reset select Constraint
polySelectConstraint -m 0;

//split associated Edges;
polyListComponentConversion -tv;
polySplitVertex;

// reselect all vertices
int $vertexCount[] = `polyEvaluate -v $thisObject`;
select -r ($thisObject + ".vtx[0:" + $vertexCount[0] + "]");
string $vertices[] = `ls -sl -fl`;

// set scale multiplier here
float $multiplier = 10;

string $vertex;

progressBar -e -bp -ii 1 -st "Adapting to UV layout" -max `size($vertices)` $gMainProgressBar;

for ($vertex in $vertices) {
 if(`progressBar -q -ic $gMainProgressBar`) { break; }

 progressBar -e -step 1 $gMainProgressBar;

 $uv = `polyListComponentConversion -tuv $vertex`;
 float $pos[] = `polyEditUV -q -vValue $uv`;
 $pos[0] \*= $multiplier;
 $pos[1] \*= $multiplier;
 xform -ws -a -t $pos[0] $pos[1] 0.0 $vertex;
};

progressBar -e -ep $gMainProgressBar;

// merge vertices after remapping. Depening on geometry and UV Layout, may create non-manifold geometry.
polyMergeVertex -d 0.001 -ch 1 -tx 0 $thisObject;

print "Phew!";