

PART2

Name	Scaling	Rotation	Translation	Primitives
Chair1	(1.5,1.5,0)	(270,Ry)	(0.35, 0, 0.5)	Slab
Chair2	(0.5,0.5,0)	(90,Ry)	(0.65, 0, 0.5)	
Desk1	(1,1.5,1)	(90,Ry)	(0.45, 0, 0.5)	Slab
Desk2	(1,1.5,1)	(90,Ry)	(0.55, 0, 0.5)	
TV1	(1,1,1)	(270, Ry)	(0.9, 0, 0.5)	Slab, Cylinder
TV2	(2,2,2)	(180,Ry)	(0.5, 0.2, 0.55)	
Lamp1	(2,2,2)	NA	(0.5, 1, 0.5)	Cylinder, Sphere
Lamp2	(1.2,1.2,1.2)	(270,Rz)	(1, 0.5, 0.5)	
Laptop1	(1,1,1)	NA	(0.5, 0.2, 0.5)	Slab
Laptop2	(2,2,2)	(90,Rx)	(0,1, 0, 0.5)	

$$X1 = S * R * T * x$$

PART3

Union	Two objects can be attached together. For example, TV and laptop could be put on the desk
Insert	Some parts of two objects can overlap. Laptop could be inserted into the drawer of the desk.