COM218 LAB8

P1. Write a function that will return a cube object with the first row as its center point. The function will take the coordinates of the center point and the edge length as parameters. Create and display 3 cubes in different positions.

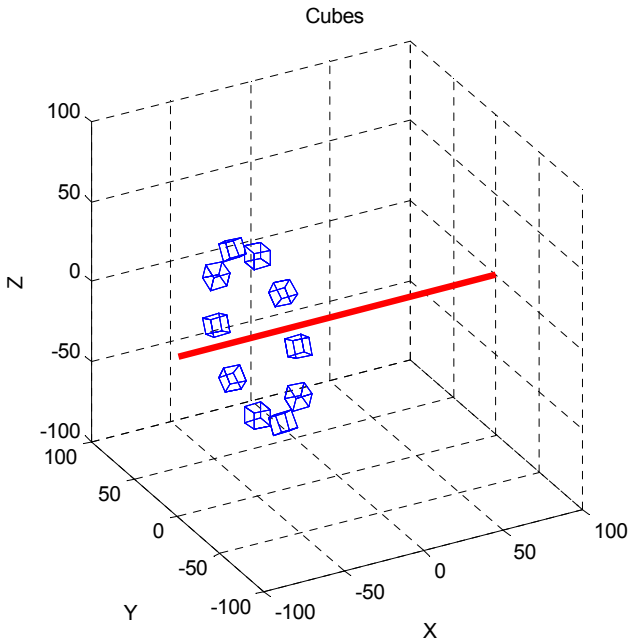
P2. Using the function above create a cube at the origin and animate its translation along the line x=y=z.

P3. Repeat P2 with scaling such that the cube triples in size in the first half and shrinks back to its original size in the second half of the animation.

P4. Create a cube with center at x=0, y=0, z= (z_max/2). Animate rotation around the x axis. Extend the graphical space such that the origin is at the center by replacing the line with the axis command in plot_objects_3d to

```
axis( [-x_max x_max -y_max y_max -z_max z_max ]);
```

The figure below shows a ghosted image of the animation. The red line is the x axis.



P5. Repeat P4 with two cubes C1 and C2. C1 should rotate around the x=z line (y=0) as shown on the left below. C2 should be positioned at the origin and rotate around the z axis as shown on the right. The two cubes should be moving in the same animation.