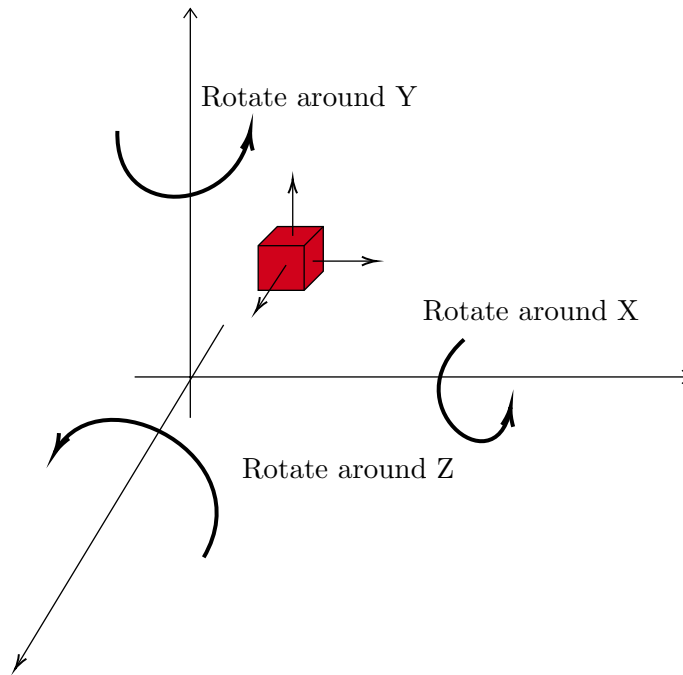


Problem 1: Draw a cube that moves in a random direction, in x and y direction it should NOT go outside of the canvas, in +z and -z direction it should not go outside of the viewing plane, the cube should be big enough to show the animation, use different color for each vertex of the cube, the cube should orbit itself randomly once per second around X, Y and Z axis.



The point can move to one of it's 26-neighbours, one random move per second.

$P(x-1, y+1, z-1)$	$P(x, y+1, z-1)$	$P(x+1, y+1, z-1)$
$P(x-1, y, z-1)$	$P(x, y, z-1)$	$P(x+1, y, z-1)$
$P(x-1, y-1, z-1)$	$P(x, y-1, z-1)$	$P(x+1, y-1, z-1)$

$P(x-1, y+1, z)$	$P(x, y+1, z)$	$P(x+1, y+1, z)$
$P(x-1, y, z)$	$P(x, y, z)$	$P(x+1, y, z)$
$P(x-1, y-1, z)$	$P(x, y-1, z)$	$P(x+1, y-1, z)$

$P(x-1, y+1, z+1)$	$P(x, y+1, z+1)$	$P(x+1, y+1, z+1)$
$P(x-1, y, z+1)$	$P(x, y, z+1)$	$P(x+1, y, z+1)$
$P(x-1, y-1, z+1)$	$P(x, y-1, z+1)$	$P(x+1, y-1, z+1)$