## Async:

## **Post in CS Topics Async Channel**

- Find an article or video that shows how 3D graphics are used in movies and in other applications. Based on the article, explain how you would incorporate this information into a lesson for 3D graphics.
- https://www.npr.org/2010/11/19/131447068/untangling-the-hairy-physics-of-rapun zel I thought this was a great vantage point for this topic as it emphasizes the importance of building an engine that allows for the production of many movies involving lots of movement. I would incorporate topics such as the movement and how it displays weight. I currently have a mini-unit for CSS animations and would include this podcast as a discussion to make motion seem more realistic.

## Homework:

1. From the <u>code along</u> we did in class, starting on line 91, finish connecting the points to complete the cube.

Please reference file code along.py in this repo

- Based on the <u>starter code</u>, you are to create a 3D graphic of your choice. It cannot be a cube, however, it can be any other shape of your choice (triangle prism, rectangular prism, etc)
  - Use the table below to help you find your points ( you do NOT need to fill in the whole chart)
  - b. The program will automatically do the conversion for you
  - c. You can also use the Geogebra to also help figure out your Start points

Please reference file homework.py in this repo

Old point (x,y,z)	Starting point x [1,0,0] + Starting point x [0,1,0] + Starting point x [0,0,0]]	New Point
Ex: (1,1,1)	(1,1,1) (1,0,0) = (1,0,0) + (1,1,1) (0,1,0) = (0,1,0) + (1,1,1)(0,0,0) = (0,0,0)	(1,1,0)
0,1,0	(0,1,0) (1,0,0) = (0,0,0) + $(0,1,0) (0,1,0) = (0,1,0)$ + $(0,1,0)(0,0,0) = (0,0,0)$	0,1,0

1,-1,1	(1,-1,1) (1,0,0)= (1,0,0) + (1,-1,1) (0,1,0) = (0,-1,0) + (1,-1,1)(0,0,0) = (0,0,0)	1,-1,0
-1,-1,1	(-1,-1,1) (1,0,0) = (1,0,0) + (-1,-1,1) (0,1,0) = (0,-1,0) + (-1,-1,1)(0,0,0) = (0,0,0)	1,-1,0
0,-1,-1	(0,-1,-1) (1,0,0) = (0,0,0) + $(0,-1,-1) (0,1,0) = (0,-1,0)$ + $(0,-1,-1)(0,0,0) = (0,0,0)$	0,-1,0