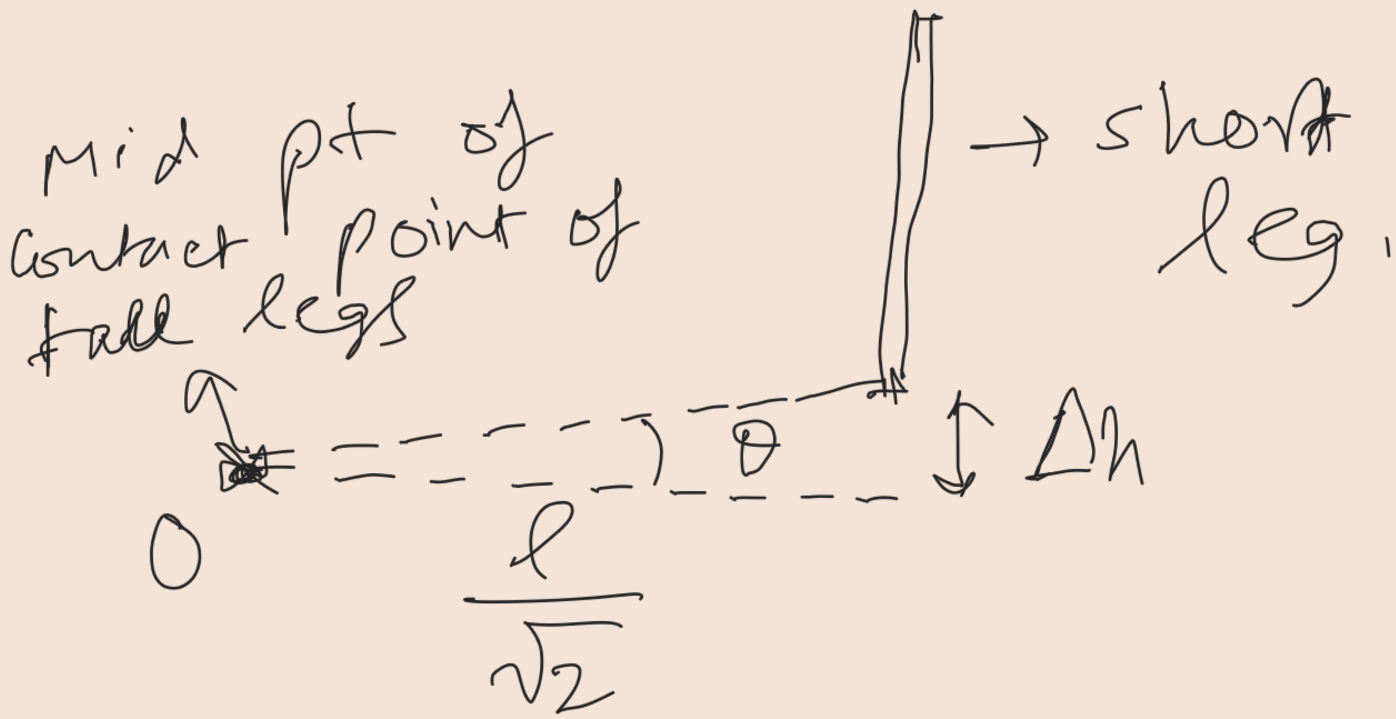
Lets find the angle by which the table rotates wrt horizontal when the shorter leg touches ground.

The rotation axis of the table will be the line passing through the contact points of two large legs near to the short leg. Hence,



$$\theta = \frac{(\Delta h)}{\frac{l}{\sqrt{2}}} = \frac{(\Delta h)\sqrt{2}}{l}.$$

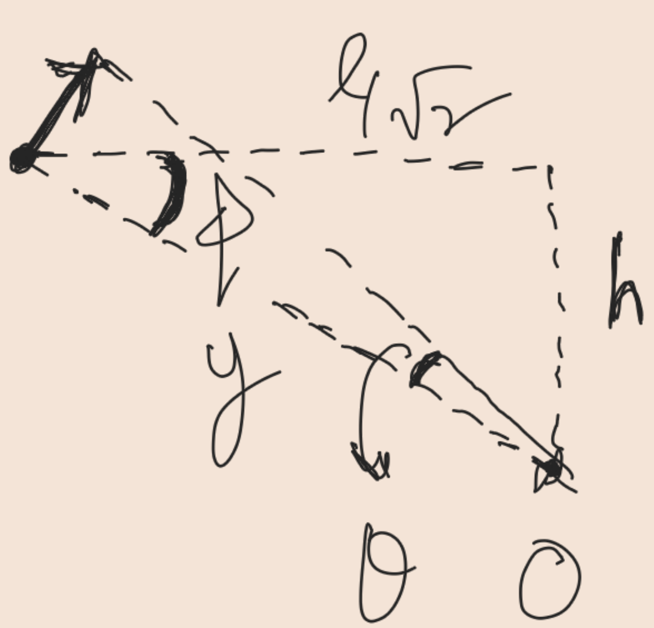
The shift of CM of table surface will be

$$\frac{\Delta x}{h} = \frac{(\Delta h)\sqrt{2}}{l}$$

$$\Delta x = \frac{h(\Delta h)\sqrt{2}}{l}.$$

Now lets find horizontal displacement of vertex where load is to be kept.

Let this be $\Delta x'$



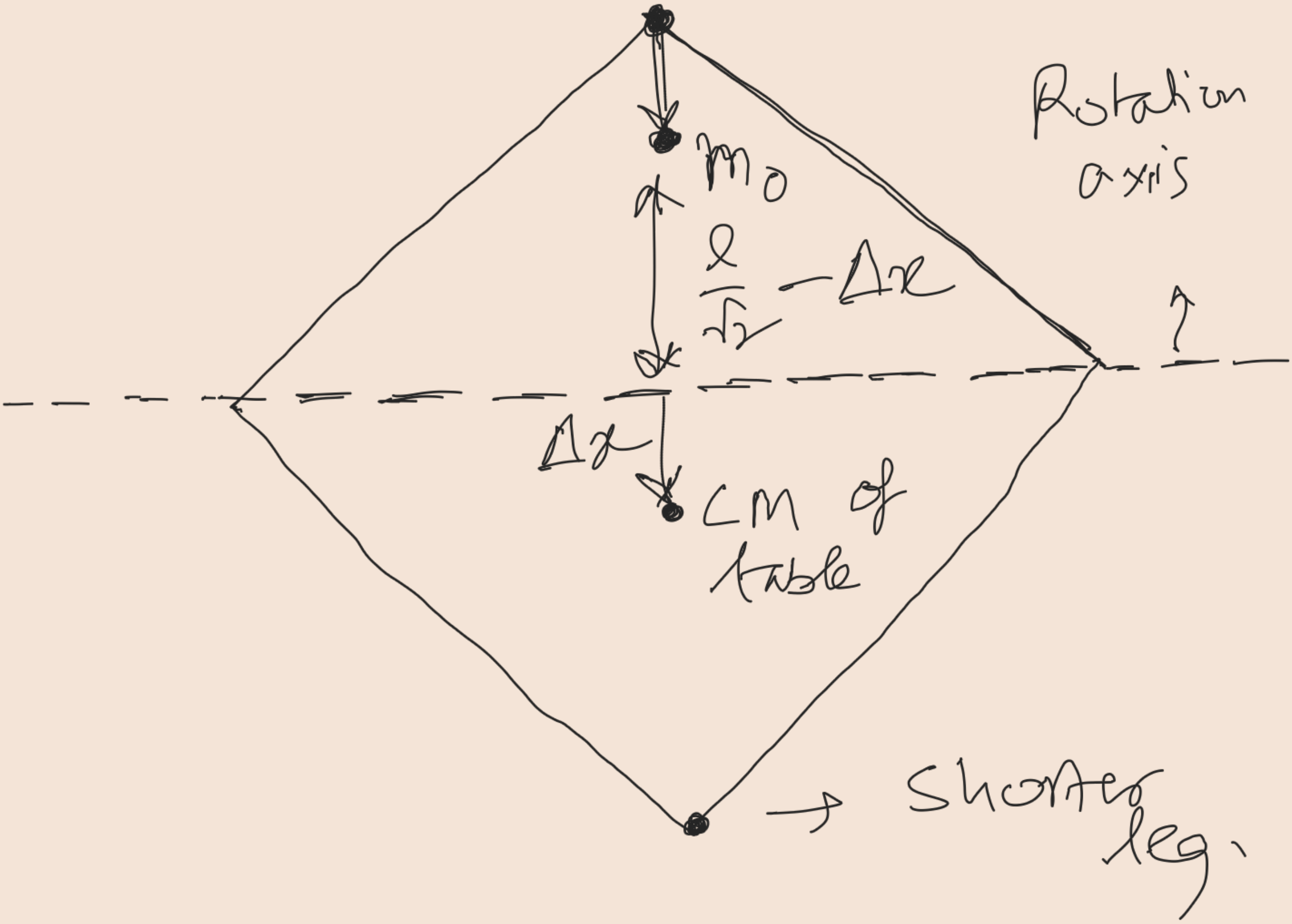
$$\Delta x' = (y)(\theta)\sin\phi$$

$$y \sin\phi = h.$$

$$\Delta x' = (h)\,\theta = \frac{h(\Delta h)\sqrt{2}}{l} = \Delta x$$

Now the final stage of torque balancing.

Lets first draw the plane of table when its tilted.



$$m_0 \cancel{g}\left(\frac{l}{\sqrt{2}} - \frac{h(\Delta h)\sqrt{2}}{l}\right) = M \cancel{g}\left(\frac{h\,\Delta h\,\sqrt{2}}{l}\right)$$

$$M = m_0\left[\frac{l^2}{2h(\Delta h)} - 1\right]$$

Now a remarkable observation. We have balanced torque under 'tilted' condition, which just creates zero normal reaction from shorter leg. This doesn't correspond to the situation when table stays 'horizontal'. This situation just starts to turn the table back from tilted orientation.