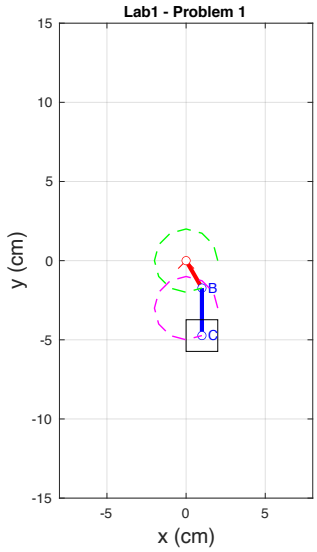
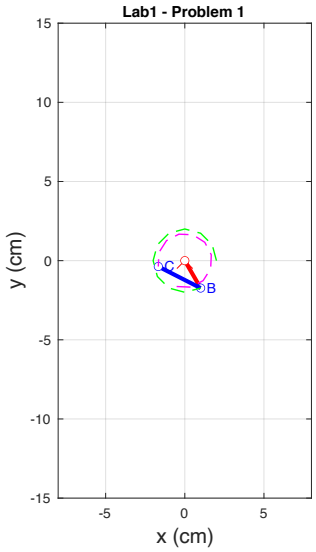
A)

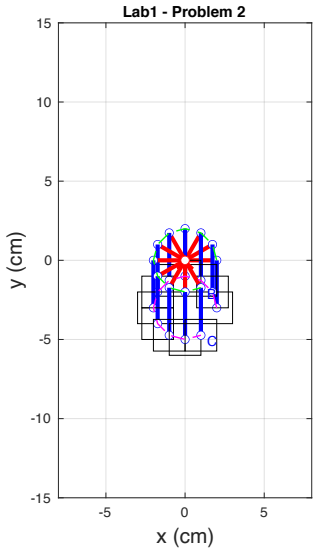


Case 1

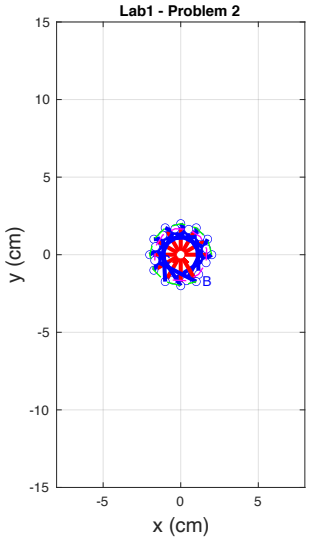


Case 2

B) The last two digits in my student number is 33.



Case 1



Case 2

C) An arc of a circle.

D) Let the angle between the two links be γ. When $\theta = 90$, $\gamma = 0$ since the link is being pulled down by gravity, so it must be pointing straight down. Then, as link 2 rotates from the vertically up direction, γ has to increase at the same rate as θ in order to keep link 2 pointing straight down. Thus, between $\theta \in [0,360)$,

$$\gamma = |-90 + \theta|$$

More generally, for angles greater than 360 degrees or less than 0 degrees,
$\gamma = 90 - \theta$ for $\theta \in [-90 + 360n, 90 + 360n], n \in \mathbb{Z}$
$\gamma = -90 + \theta$ for $\theta \in (90 + 360n, 270 + 360n), n \in \mathbb{Z}$

Optional Problem: