VM350 Mini-project 1 Rubric

1. Design (synthesize) linkages to your clamp model considering the required self-locking target. (16’)
   1. Sketch (8’)

* Dimension (3’)
* Material (1’)
* Graph neatness (2’)
* Related function (2’)
  1. Check the Toggle position(s) (8’)
* Check (4’)
* How many (2’)
* Grashof or Non-Grashof (2’)

1. Discuss how to achieve locking & unlocking functions. (18’)
   1. Dimension for the whole device and required deformation to achieve locking (9’)
   2. Actuation method for locking and unlocking of the device (9’)
2. Analyze the motion of the linkages in your device. (16’+2’)
   1. Technical problems and correction methods (6’)

* First problem + correction (4’)
* Second (or more) problem + correction (2’)
  1. Modify (12’)
* First modification (4’)
* Second (or more) modification (2’)
* Comparison study (4’)
  + Conceptually compare (2’)
  + With iteration on Step 1 and 2 and have calculations (2’)
* Interesting modifications (2’ bonus)

1. Team members’ contribution (Special cases handled separately)

Total (50’ + 2’ bonus, maximum 50’)