Task 3 - Problem Statement

In this task you have to make the lift mechanism for the theme as instructed in the Rulebook.

- Read the instructions given in *Preparing and placing Lift Structure* and *Hardware Specification for Lift Mechanism* sections in the Rulebook.
- You are free to design a lift mechanism adhering to the specifications in the Rulebook.
- For demonstration purpose, initially the lift should be at the bottom position. Place an object of weight approximately that of your robot. Lift should respond accordingly. Once it reaches the top, remove the object and place it again, the lift should go back down to initial position.

This task will evaluate your progress in lift construction. Marks will be awarded based upon the design of your mechanism considering the following parameters:

1. A robust and reliable mechanism which will not distort in transportation (to Finals if selected)
2. Neat and well finished construction with no unsightly wires poking out here and there
3. Proper choice and use of materials to construct the lift elements
4. Innovation in design beyond these key elements will be appreciated

Note: We expect you to continue development of your lift and have the final working implementation ready in Task 4's submission.

Submission Instructions:

Instructions for Creating Video

- The resolution of the video should be good enough. You have to use atleast 5 Megapixel or higher camera to shoot the video.
- The video should be in one of the two following formats: **'.avi'** or **'.mp4'**.
- The video should have demonstration part consisting of:
  1. Components used
  2. Working mechanism of lift structure
  3. Modularity and special features of your Lift Mechanism
- The video should not be more than 5minutes.

Here are a few tips for shooting good quality video:

- Camera should be kept stable while recording.
- Keep the background, any lighting, etc. constant during the video shooting.
- There should be no interference in terms of background noise or movement while shooting the video.

Instruction for Uploading video on YouTube:

- Upload video using the title **eYRC-NS#<TeamID>_Lift_Mechanism**
  - For example: If your team ID is 16 then, save it as eYRC-NS#16_Lift_Mechanism
  - While uploading the video on YouTube select the privacy setting option as **Unlisted.**
  - Create a text file, include the URL of the video and save it with filename eYRC-NS#16_Lift_Mechanism.

Note: You can use Jumper wires and breadboard if needed.

All the Best!