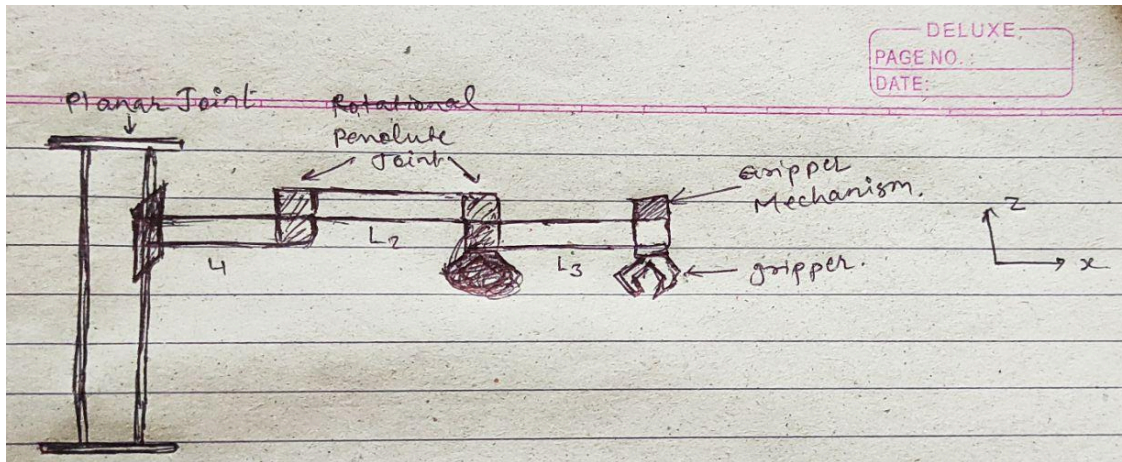
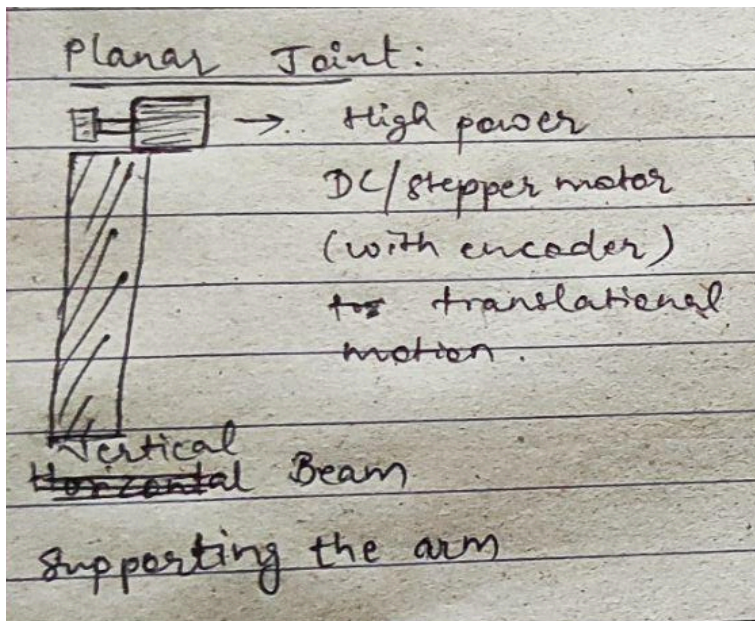


## Design ideation of the Packaging Robot

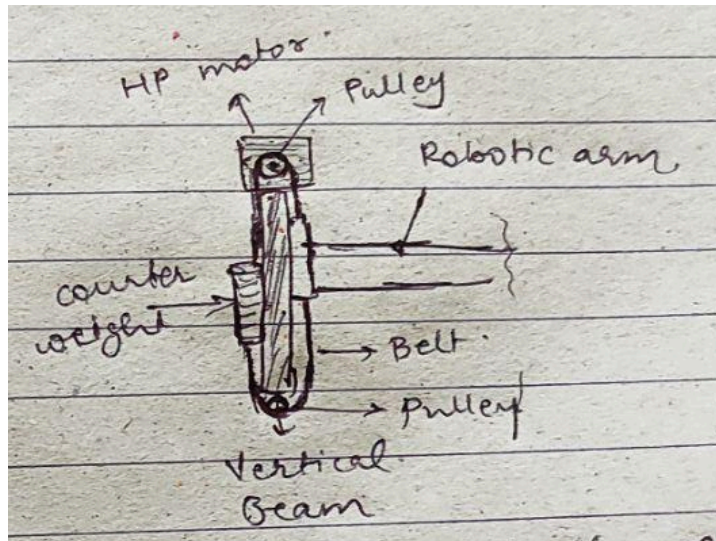


This is the basic design for the robotic arm to pick and place. It will contain PRR joints, and a pneumatic gripper will be installed on the last link.

-> Design Ideation for P joint:



A vertical beam will support the whole link system, and the translation in the Z axis will be done with the help of a belt mechanism driven by a high-power DC/Stepper motor.



A counterweight equal to the weight of the links will be used to cancel out the torque applied by the links on the motor. This way, the motor will not be required to apply constant torque to keep the link at a certain Z.