Implement PID on the ledge rotation to minimize the angle error to make it horizontal to balance the ball when it collides. Set the value of Kp, Ki, Kd initially

Add this all body and shapes to the space

Use SimpleMotor constraint over PivotJoint to regulate rotatory motion of ledge around the joint using pymunk.constraint.SimpleMotor(a,b,rate) And also set maximum force which motor can apply using joint\_motor.max\_force

Use PivotJoint constraint (Its like pivot) to at the center of the ledge for free movement of ledge about its center Using pymunk.constraint.PivotJoint(a,b,poisition)

Create Objects body in using functions and

Define its position, size, density, elasticity etc.

hhh

Wall of window as static\_body using pymunk.Poly.Create\_box()

Dynamic body of Ball

For shape: pymunk.Circle()

Dynamic body of Ledge

For shape: pymunk.Poly.Create\_box()

**FLOW-CHART OF LOGIC**

Pygame basic syntax

Import required libraries Pygame, pymunk, sys etc.