USEFUL APIs

① **sim.getObject('path/alias')**

→ To use any object of the scene, you first need to access it through code. this API will help in doing so.

→ This will return what we call object handle.

→ Ex- motor = sim.getObject('Motor_C')

② **Sim.getJointVelocity(joint_handle)**

→ In the pendulum, you may want to retrieve angular velocity, use this API.

→ Ex- alpha.dot = sim.getJointVelocity(motor)

③ **sim.getJointPosition(joint_handle)**

→ This will return angle → rad or deg (check yourself → just print values)

→ Ex- alpha = sim.getJointPosition(motor)

④ **sim.setJointTargetVelocity(joint_handle, velocity)**

→ Ex- sim.setJointTargetVelocity(motor, 1)

⑤ **sim.setJointTargetForce(joint_handle, force_value)**

→ This will provide torque to joint (i.e, here force-value is actually torque)

→ Ex- sim.setJointTargetForce(motor, U)   [U → input torque]

FOR MORE INFO → Refer API Reference of Coppeliasim