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 CS-330 2-3  
 3D Scene Proposal  
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For my 3D scene, I plan to recreate a simple tabletop environment featuring a coffee mug resting on the surface. This streamlined approach keeps the scope manageable while still allowing for attention to detail in object modeling, positioning, and lighting. The scene will be clean and minimal, ensuring both the table and mug are the focal points.

The table will be constructed using a plane for the tabletop surface and four cylinders for the legs. The tabletop will serve as the grounding element of the scene, providing a base for object placement. The legs will be positioned so they connect directly to the floor, ensuring the table looks stable and realistic.

The coffee mug will be modeled using two basic shapes: a cylinder for the main body of the mug and a torus for the handle. This combination meets the requirement that at least one object in the scene is composed of two or more primitive shapes. The mug will be positioned so it sits flush with the tabletop surface, with its handle oriented naturally for visual balance.

By limiting the scene to these two objects, I can focus on precision in scale, placement, and texture mapping, as well as experiment with realistic lighting to highlight the materials. This will also leave room for potential enhancements, such as reflective surfaces or more detailed texture work, without overcomplicating the build.

This scene remains fully aligned with the goals of Triangle and Cube Studios by creating a polished, realistic 3D environment that uses OpenGL’s core features while keeping the design simple and achievable.

**Reference Image for 3D Scene**

The image below represents the scene I plan to replicate in 3D. It shows a workbench with a coffee mug, toolbox, and screwdriver arranged on the tabletop. These objects will be modeled using the basic 3D shapes outlined in the project requirements. The workbench surface will act as the plane to ground the scene.

