A table with objects on it

Description automatically generatedA table with a planter and a candle on it

Description automatically generatedA table with objects on it

Description automatically generatedA desk with a lamp and plants

Description automatically generated**2-3 Project Proposal for 3D Scene Replication in OpenGL**

I have chosen to replicate a scene consisting of various household objects placed on a wooden table, as shown in the attached images. This scene includes a variety of shapes such as a pink roller, pinecone, rocks, a lamp, and various decorative items. The setup allows for the creation of multiple interesting shapes and the application of textures and lighting to simulate a realistic virtual environment. The scene will be constructed using multiple photos taken from different angles to ensure a comprehensive understanding of the objects' spatial arrangement.

**Objects to be Replicated**

1. Pink Roller
2. Pinecone
3. Rocks
4. Wooden Table

**Breakdown of 3D Shapes**

* **Pink Roller:** Cylindrical with a textured surface.
* **Pinecone:** Complex organic shape approximated with cones and spheres.
* **Rocks:** Irregular shapes using spheres and boxes.
* **Wooden Table:** Box for the tabletop.

**Explanation and Scope**

The chosen objects cover a wide range of basic 3D shapes, ensuring that the project is both educational and challenging. The objects in the scene provide a clear demonstration of how multiple basic shapes can be combined to form more complex structures.

* **Pink Roller:** Demonstrates the use of texture mapping to simulate the unique surface.
* **Pinecone:** Showcases the combination of multiple shapes to approximate a complex natural object.
* **Rocks:** Helps in understanding how to create and texture irregular shapes.
* **Wooden Table:** Provides an opportunity to model and texture a more complex structure with multiple components.