

## Lab 1.4 Assignment:

### 1. At least five teapots:

We can create five teapots using the model, view and projection matrices for all of them, with one being the root and others connected in a one-to-one and one-to-many relationship.

### 2. Show one to one relationship:

The third teapot in the picture is connected to the second one via `local3 = rotate_y_deg(local2, rotatez);` & `mat4 global3 = global2 * local3;` here, `local2` and `global2` belong to the second teapot are being sent to the third one.

### 3. One to many relationship:

The root teapot is connected to the second one and the two others on its either sides depicting a many-to-one relationship.

### 4. Keyboard control for translation of root object:

In the `keypress` function of `freeglut`, we can add the code:

```
if (key == 'r') {  
    //Translate the base, etc.  
    trans = trans + vec3(1.0f, 0.0f, 0.0f);  
}
```

According to the key values, the root object will translate, moving the others with it too.

