Aim:
To simulate real-time adjustments of a 3D cube in Blender, including resizing, translation, rotation, and animation. The objective is to demonstrate how objects can be manipulated and animated interactively for use in simulations, animations, or educational visualizations.

Procedure:

1. Set Up the Environment

- Open Blender.
- Start a new project (by default, a cube will be present in the scene).
- Adjust the workspace (camera, lighting, and background if required).

2. Resizing (Scaling) the Cube

- Select the cube.
- Use the Scale tool (shortcut: `S`) to increase or decrease the size.
- Scale can be applied uniformly (press `S` and drag) or along a single axis (`S` + `X`, `Y`, or `Z`).

3. Translation (Moving) the Cube

- Select the cube.
- Use the Move tool (shortcut: `G`) to drag the cube in 3D space.
- Restrict movement to an axis by pressing `X`, `Y`, or `Z` after pressing `G`.

4. Rotation of the Cube

- Select the cube.
- Use the Rotate tool (shortcut: `R`) to rotate the cube in the viewport.
- Restrict rotation to a specific axis by pressing `R` followed by `X`, `Y`, or `Z`.

5. Animation of the Cube

- Position the cube at the starting location, scale, or rotation.
- Insert a keyframe (press `I` → choose Location, Rotation, or Scale).
- Move to another frame on the timeline (e.g., frame 50), adjust the cube's position/scale/rotation, and insert another keyframe.
- Repeat for multiple transformations.
- Play the timeline (`Spacebar`) to see the cube animate in real-time.