Part 5: Questions based on the exercise above, answer the following questions:

**- How does changing the values of the box-shadow property affect the visual depth of the box?**

Initially, without the box-shadow property, our box looks plain but after adding the box-shadow property, it creates a visual depth to our box making it look like it’s real and popping. By adjusting the values of the box-shadow property, we have the liberty to create an enhanced shadow or a subtle shadow depending on how we want our box to look. The values have a significant impact on the overall appearance and visual depth of the box.

**- Describe the visual effect of applying a linear gradient to an element. How does it differ from a solid background color?**

A solid background might be nice to use but it might look plain and flat. As a design student, we might want to make our designs stand out and be different, unique, and visually appealing compared to how it is normally approached.

Therefore, applying a linear gradient can create a visually appealing effect to our element by smoothly blending colors in directions that we prefer. This creates an exciting feel to the element and is visually engaging too. Overall, it makes our element look more dynamic and exciting compared to a solid color background.

**- Explain the difference between applying a 2D rotation versus a 3D transformation. How does the presence of perspective influence the result?**

In a 2D rotation, the element is being rotated along the z axis meaning that it is rotating on a flat plane. This results in a simple transformation where our object appears to rotate around a certain fixed point on the screen. On the other hand, 3d transformation rotates around multiple axes which means that it is rotating in a three-dimensional space. This gives our object the ability to seamlessly rotate in such a way that it appears to move on a physical space and creates a realistic effect on the object like how we visualize things in the real world.

In 2D transformation, there is no perspective and as a result, there is no sense of depth to our object so it looks like how any normal object would appear on a screen. In contrast, 3D transformation provides a perspective that as a result creates a sense of depth and illusion. It appears to be more visually engaging and realistic making the element look like it is actually in a three-dimensional space.

**- Discuss the importance of the \*\*CSS transition\*\* property when applying transformations. What user experience considerations should be taken into account?**

CSS transition property is important when applying transformations as It allows a smooth and gradual change to the element's state and style over a specified period. It also provides a cleaner and visually appealing way for the users to witness any transformations applied to the element or the object.

Some user experience considerations that should be taken into account are:

Smooth and Seamless Experience: Users prefer a smooth and clean way of change be it in any form. Sudden changes and transitions can be distracting and unpleasing for the users whereas smooth transitions can provide a more pleasant interaction and experience for the user.

Consistency: Consistency is one of the most important elements in both UI and UX design. While applying transitions and transformation to an element, consistent timing and functions can contribute to a sense of familiarity for the user making them feel comfortable while looking at any transition taking place on the screen.