LP II – Suggested Problem statements for Practical Exam
(Augmented and Virtual Reality)

1. Turn day scene into a night scene on mouse click in Unity.
2. Create a scene, where a candle is lit (with shadows and smoke), on mouse click using Unity.
3. Change a character emotion (Neutral to happy, Happy to sad, sad to angry etc.,) using Unity.
4. Depict a scene of the effect of kicking a ball in Unity (at 3 various speeds).
5. Simulate bouncing ball in Unity. The bouncing should stop gradually after the time specified by the user.
6. Create 3D model of Reading Table and props required on it and set up the Lighting for the same using Unity.
7. Design a scene that allows the user to place a character on a table and interact with it in Unity.
8. Create a basic 2D character controller. Move the player character using Unity's Input System.
9. VR Meditation Environment - Create a peaceful VR scene (waterfall, nature sounds, skybox).
10. Implement collision between any player character and the game world.
11. AR Marker-Based 3D Model Display - Detect an image marker and show a 3D model (e.g., a car).
12. AR Flashcard Learning App - Scan alphabet flashcards to display corresponding 3D models (A-E).
13. AR Business Card - Scan a business card to show LinkedIn, phone, email in 3D overlay.
14. AR Greeting Card with 3D Animation: Design an AR greeting card where scanning the card with a mobile device shows a 3D animation or message. For example, when a birthday card is scanned, balloons and confetti appear in the AR scene.
15. AR Image Recognition and Object Placement Create an AR app that recognizes an image (such as a logo or a specific picture) and places a 3D object (like an animal or character) on top of it when the image is detected.