**2. How would you approach testing an app across multiple devices with varying screen sizes, operating system versions (iOS and Android), and hardware specifications? What strategies and tools would you use to ensure comprehensive coverage?**

**Solution:**

Testing an app across multiple devices involves prioritizing key models, screen sizes, and OS versions. Emulators or simulators are useful for quick validation, but physical devices are essential for identifying hardware-specific issues, such as performance lags or touch sensitivity. Tools like Appium enable automated testing for repetitive tasks across both iOS and Android platforms, while manual testing ensures that UI/UX elements function smoothly. Platforms like BrowserStack provide remote access to a wide range of devices, helping achieve broader coverage without needing physical access to every model.

Performance testing on both high-end and low-end devices identifies issues like memory leaks or battery drain, ensuring the app runs well under different conditions. Testing under varied network environments, such as 3G or 4G, ensures the app maintains functionality even with slower connections. Finally, regular regression testing, integrated into CI/CD pipelines, helps catch bugs early and ensures that new updates don’t break existing features or disrupt performance across devices and platforms.