Experiment 11
Aim: To use google Lighthouse PWA Analysis Tool to test the PWA functioning.
Theory:
 Google Lighthouse audits PWAs for performance, accessibility, SEO, and PWA compliance. It provides improvement tips through scores and diagnostics.

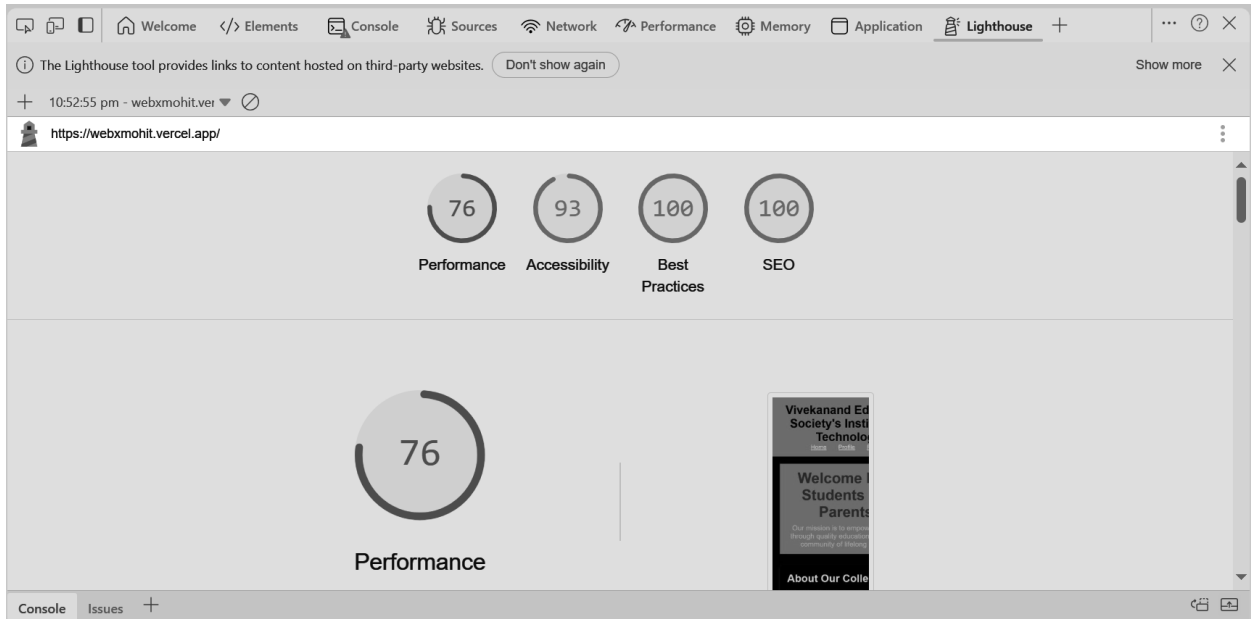Using Google Lighthouse for PWA Testing
Google Lighthouse is a free tool built into Chrome DevTools that audits web apps for performance, accessibility, SEO, and PWA compliance.
Steps to Test PWA Functionality:

1. Open Chrome DevTools
     Right-click on the page → Inspect → Go to the "Lighthouse" tab.

2. Select Categories
     Choose "Progressive Web App" along with other desired categories.

3. Run Audit
     Click "Analyze page load". Lighthouse will generate a report.

4. Review Results
     Check PWA score and key metrics like installability, service worker usage, and offline support.

Benefits:

●   Identifies missing PWA features.

●   Offers improvement suggestions.

●   Helps validate PWA readiness for deployment.

Conclusion:

Lighthouse analysis helped ensure that our Society App met core PWA criteria and improved overall performance metrics.