## Lab 4: Develop Hospital Queue using Priority Queue

Implement Hospital Emergency Queue to cater services to the patients as

- Serious (Top Priority)
- Non-Serious (Medium Priority)
- General Checkup (Least Priority)

## Tasks:

- 1. Insert patient details with assigned priority in priority Queue
- 2. Delete served patients from priority queue
- 3. Find the highest-priority patient Retrieve the task with the highest priority efficiently.

## **Reference Links**

- 1. <a href="https://www.simplilearn.com/tutorials/data-structure-tutorial/priority-queue-in-data-structure-priority">https://www.simplilearn.com/tutorials/data-structure-tutorial/priority-queue-in-data-structure-priority</a> queue operations
- 2. <a href="https://www.wscubetech.com/resources/dsa/priority-queue-data-structure">https://www.wscubetech.com/resources/dsa/priority-queue-data-structure</a>

## **Submission Guidelines:**

Upload the code file (.java/.cpp/.py) and a report (PDF).

Ensure the code is well-commented and modular.