# **Lab 3:** Implement a Task Scheduler using Treap

**Q)** Use Treap to implement a priority-based task scheduler where each task has a unique ID (key) and a priority. Higher-priority tasks should be completed first while maintaining the properties of a Binary Search Tree (BST).

**Tasks:**

1. Insert tasks into Treap – Each task has a unique task ID (key) and an assigned priority.
2. Delete completed tasks – Remove a task once it's completed.
3. Find the highest-priority task – Retrieve the task with the highest priority efficiently.

**Reference Links**

1. https://www.techiedelight.com/implementation-treap-data-structure-cpp-java-insert-search-delete/
2. https://www.geeksforgeeks.org/treap-a-randomized-binary-search-tree/