In a company there are hierarchies in the management.

1. Employee (Level 0)
2. Manager, (Level 1)
3. Senior Manager. (Level 2)
4. Director, (Level 3)
5. Vice President (Level 4)
6. President (Level 5)

If any employee has to get certain things, then he needs an approval from the manager. But there are certain things that the approval level varies. For example, if an employee needs to buy a book for his skill development, he can get it from his manager. But if he needs to go for a conference, the he may require approval from the director. So, depending on the requirement of the employee, the level of approval differs.

Book – Level Step 1

Travel for a conference – Level Steps 3

Purchase of about million-dollar equipment – Level Step 4

You can add some more scenarios

Depending on the approval requirement for an employee, the status of approval should be displayed. For example, if the employee needs conference approval, then the status should be “Your Paper is at Level 1 for approval”. Once the level 1 manager approves, the status should change to Level 2, once that is approved, it should display the status as level 3. Once the level 3 is approved, then the message for the approval should be “Your request is approved by all the levels of managers.”

Use Doubly Linked List Queue for the above-mentioned project.

Follow the SDLC pattern, Requirement Analysis, Design, Implementation, Testing and Documentation.