CSE 3010 – Data Structures & Algorithms
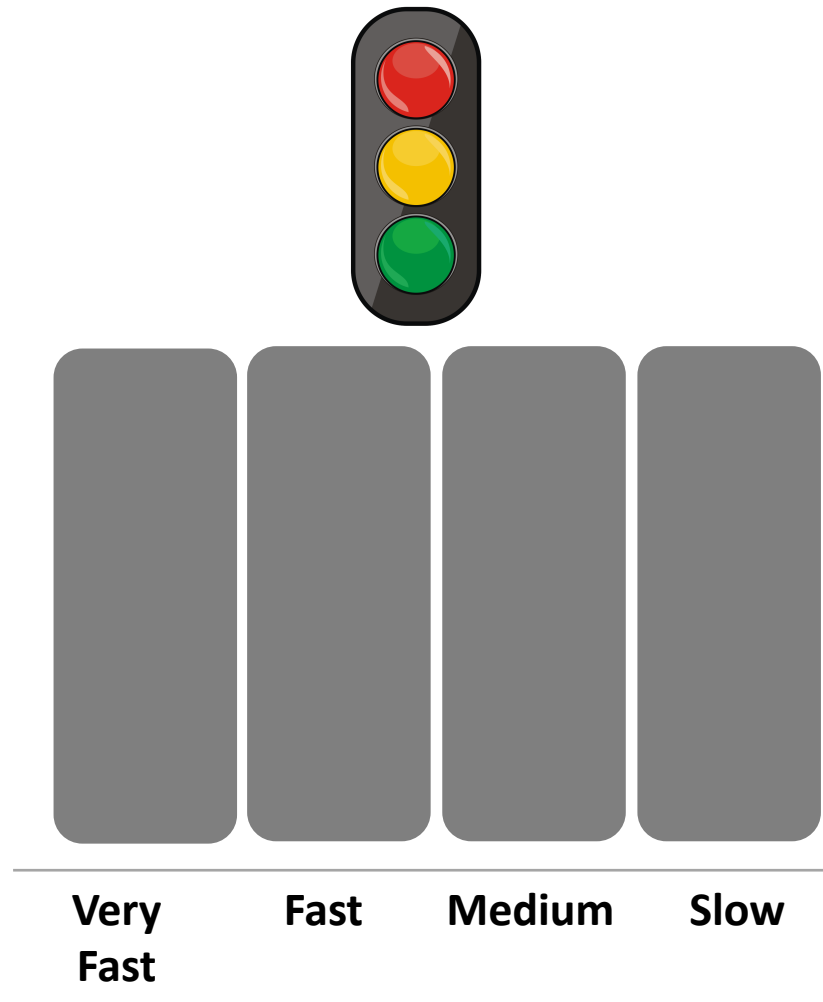
Lecture #39

What will be covered today
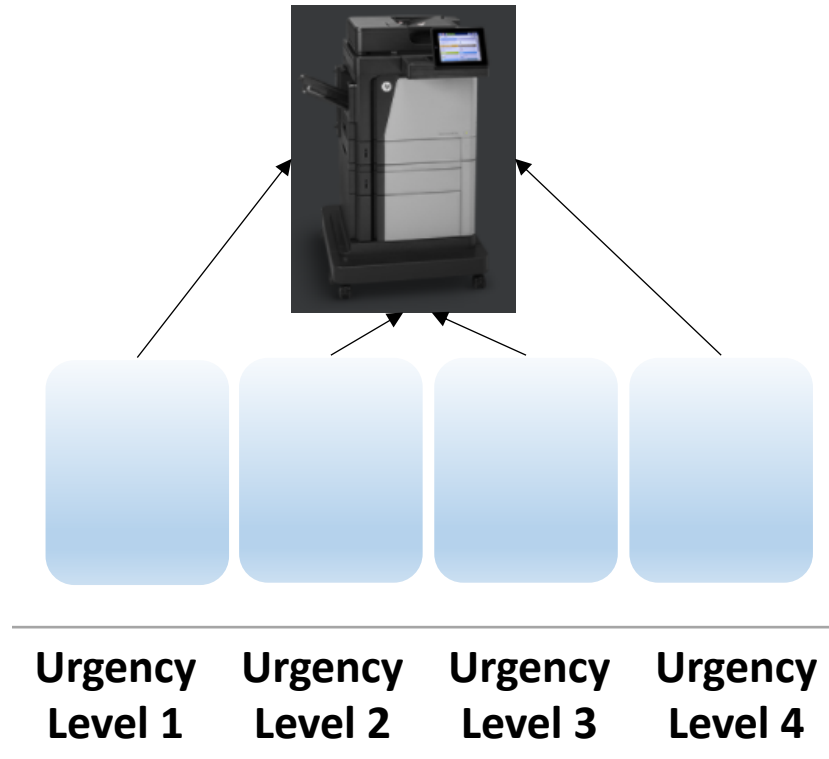
- Deletion of a node in an AVL tree
- What is a priority queue
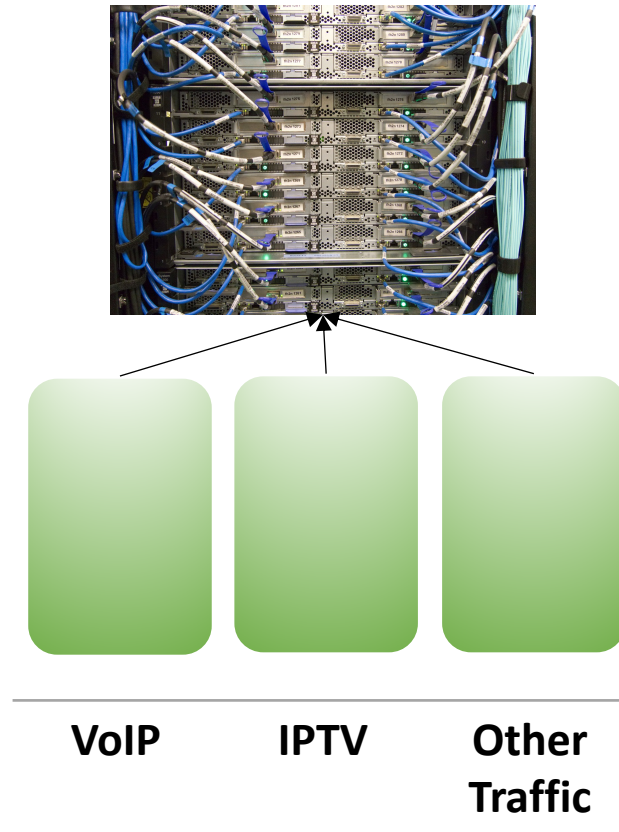
Simulation of traffic load on a busy road

Very Fast   **Fast**   **Medium**   **Slow**

Traffic light picture credits: http://clipart-library.com/images/kcKnxgL5i.png

Simulation of load on a network printer

Urgency Level 1	**Urgency Level 2**	**Urgency Level 3**	**Urgency Level 4**

Simulation of load on a network router

VoIP   **IPTV**   **Other Traffic**

Network router image credits: https://cdn.pixabay.com/photo/2018/01/22/21/34/sever-3100049_1280.jpg

Priority queue implemented using a queue

Assumption: Removal of items with highest priority number

Case 1:

Take care of priority while adding an item into the queue
No change when removing an item from the queue

Case 2:

No change while adding an item into the queue
Remove item having the highest priority from the queue