


Part A

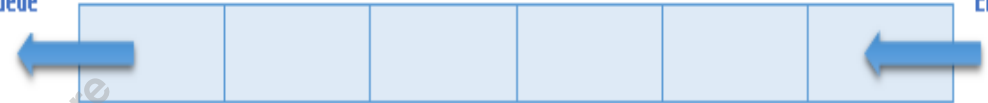
MAIL SERVER

Users HashTable

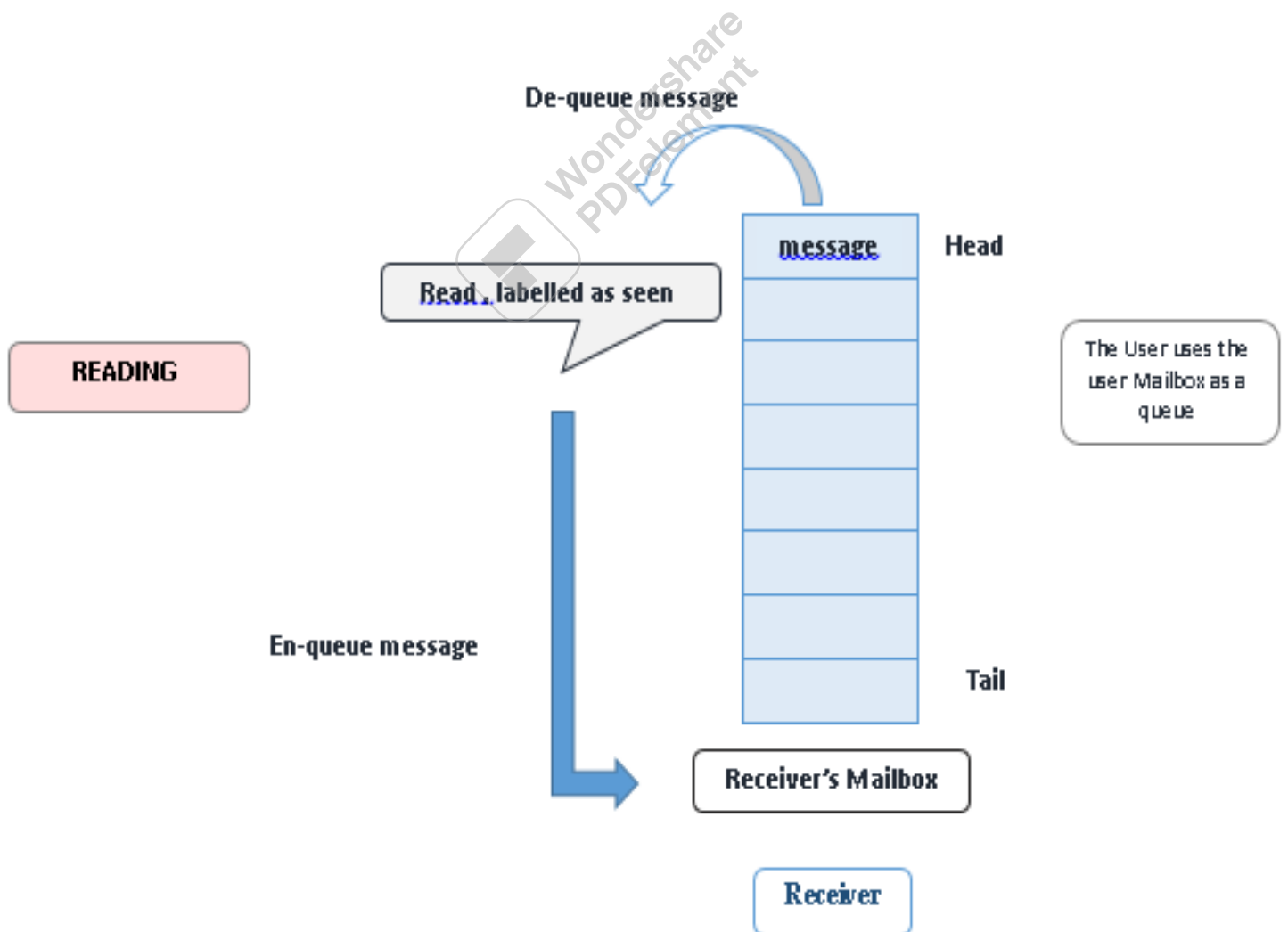
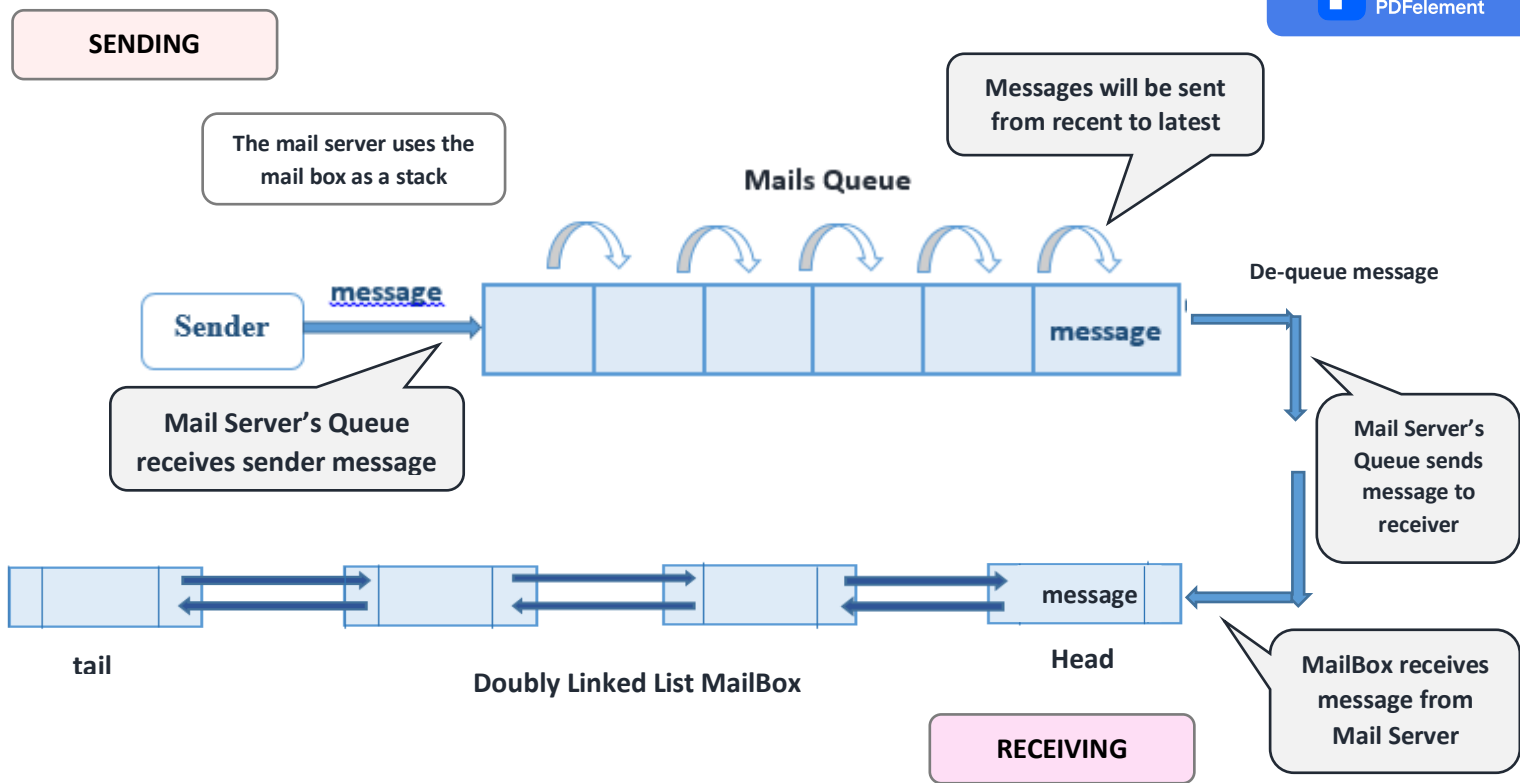
Index	Users		
	ID	Name	MailBox
			
0	15410	Amira Boudaoud	
1	48752	Yasmine Kaced	
2			
3			
4			
5			

Mails Queue

Deque

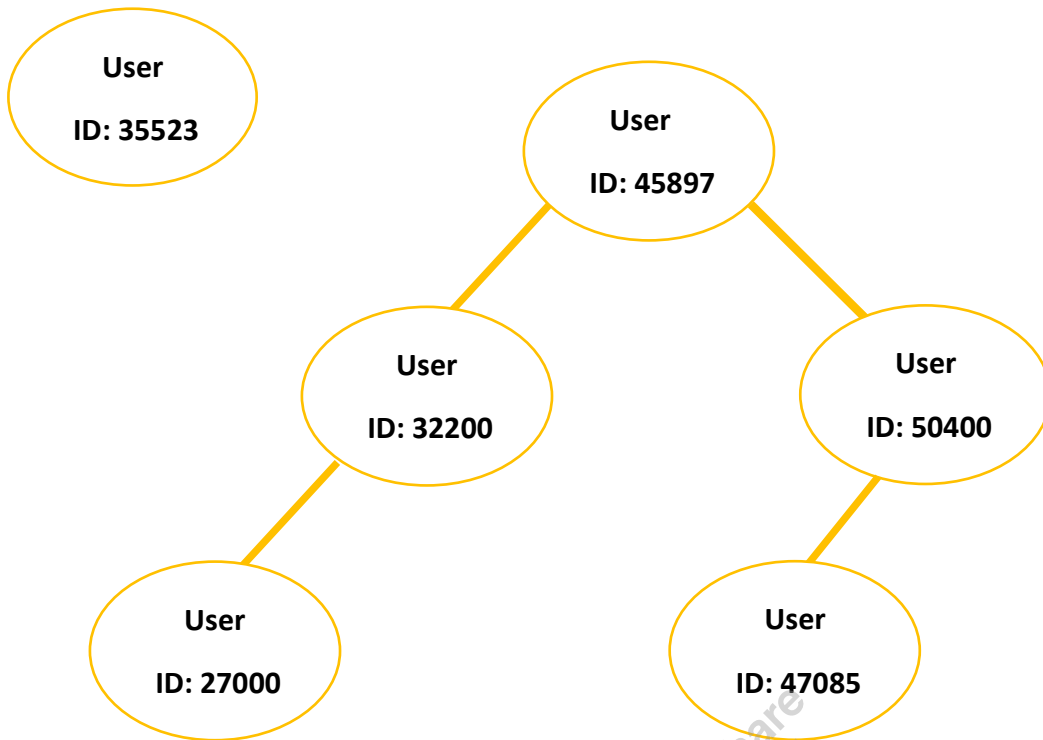


Enqueue

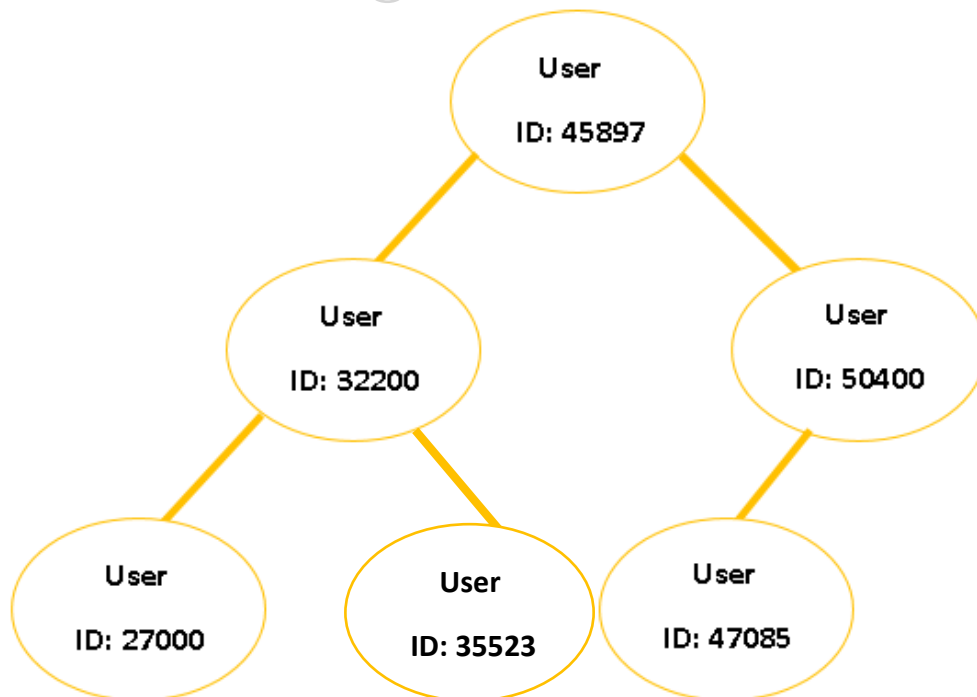


Binary Search Tree

Sign up : create new user

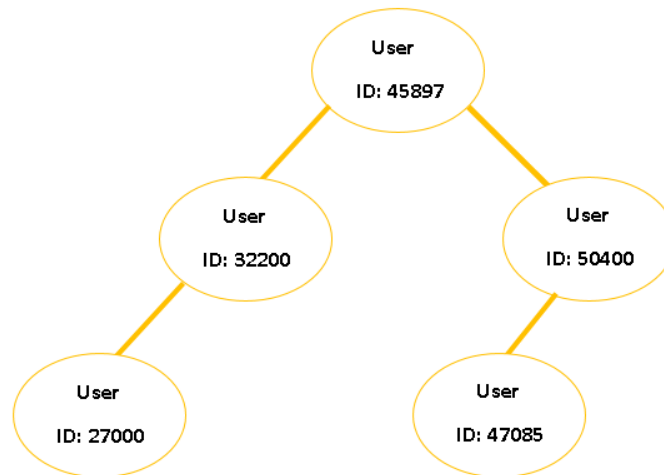
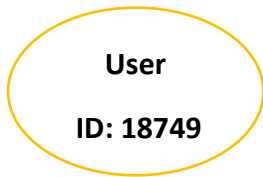


insert new user in the tree

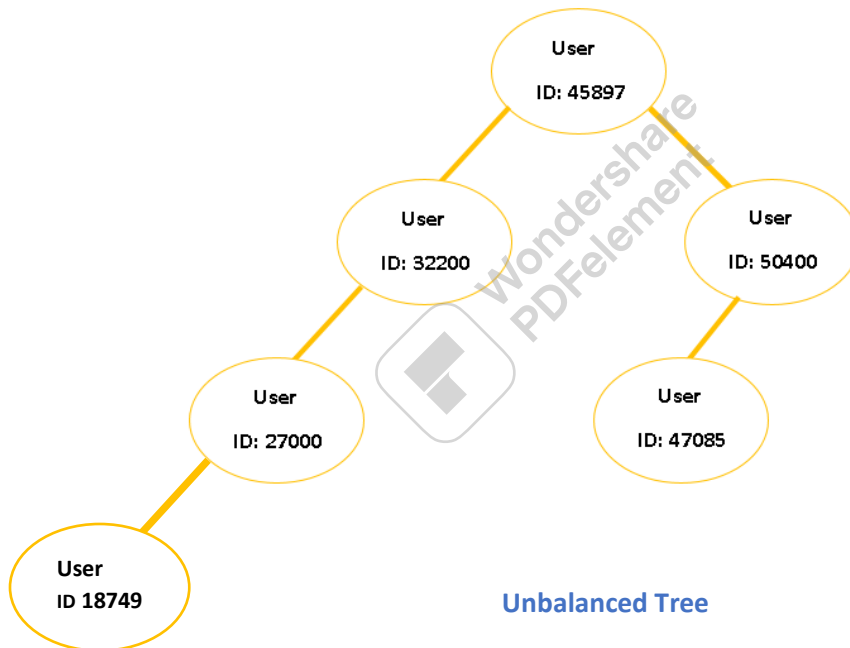


AVL Tree

Sign up : create new user

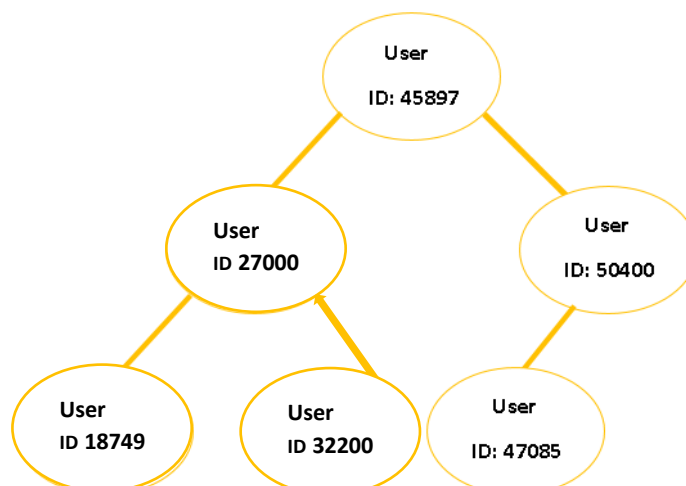


insert new user in the tree



Unbalanced Tree

Left Heavy



Balanced Tree