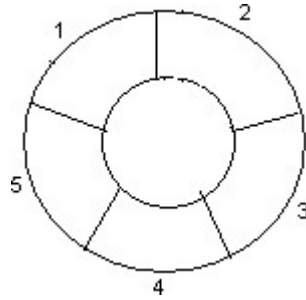
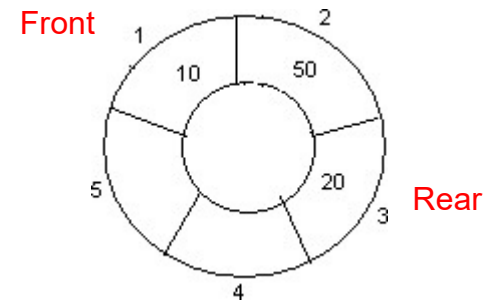


Example: Consider the following circular queue with  $N = 5$ .

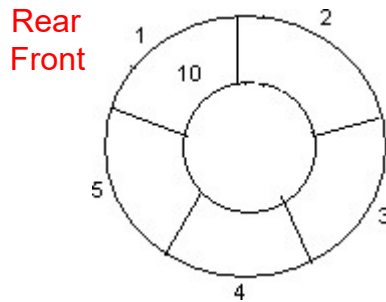
1. Initially,  $\text{Rear} = 0$ ,  $\text{Front} = 0$ .



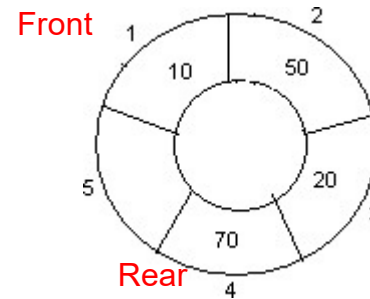
4. Insert 20,  $\text{Rear} = 3$ ,  $\text{Front} = 0$ .



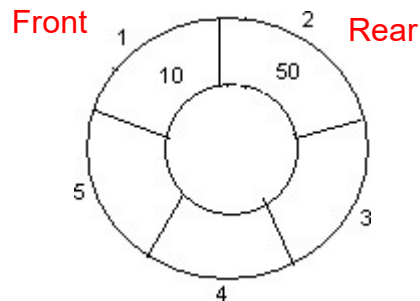
2. Insert 10,  $\text{Rear} = 1$ ,  $\text{Front} = 1$ .



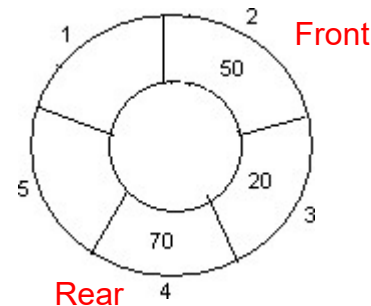
5. Insert 70,  $\text{Rear} = 4$ ,  $\text{Front} = 1$ .



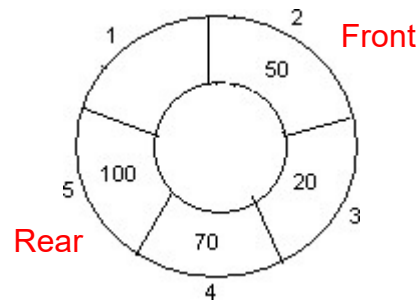
3. Insert 50,  $\text{Rear} = 2$ ,  $\text{Front} = 1$ .



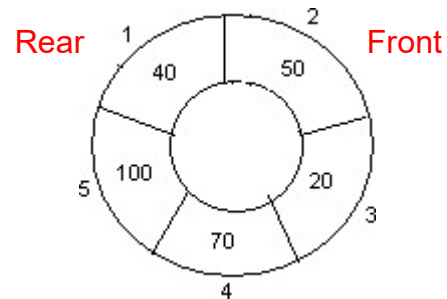
6. Delete front,  $\text{Rear} = 4$ ,  $\text{Front} = 2$ .



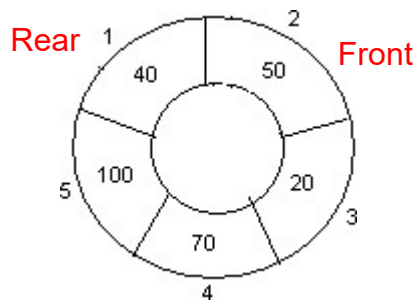
7. Insert 100, Rear = 5, Front = 2.



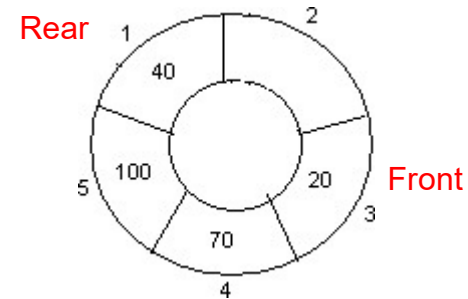
8. Insert 40, Rear = 1, Front = 2.



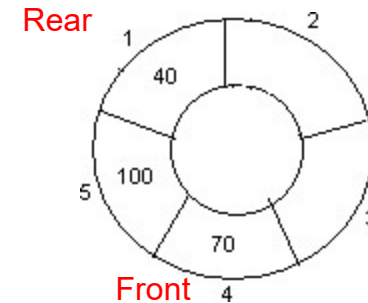
9. Insert 140, Rear = 1, Front = 2.  
As  $\text{Front} = \text{Rear} + 1$ , so Queueoverflow.



10. Delete front, Rear = 1, Front = 3.



11. Delete front, Rear = 1, Front = 4.



12. Delete front, Rear = 1, Front = 5.

