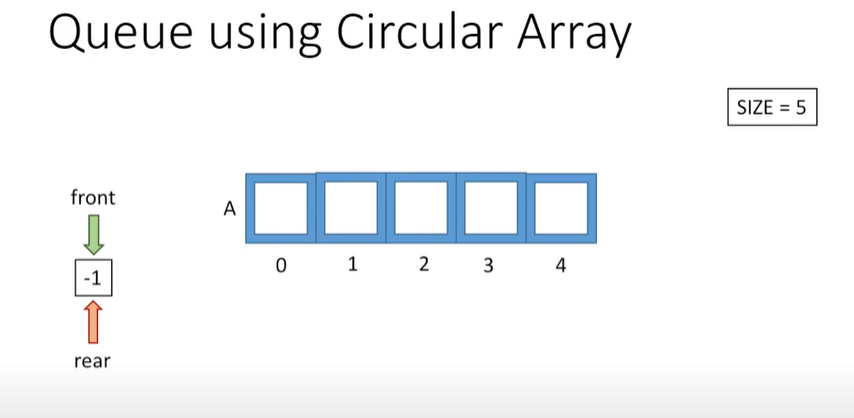
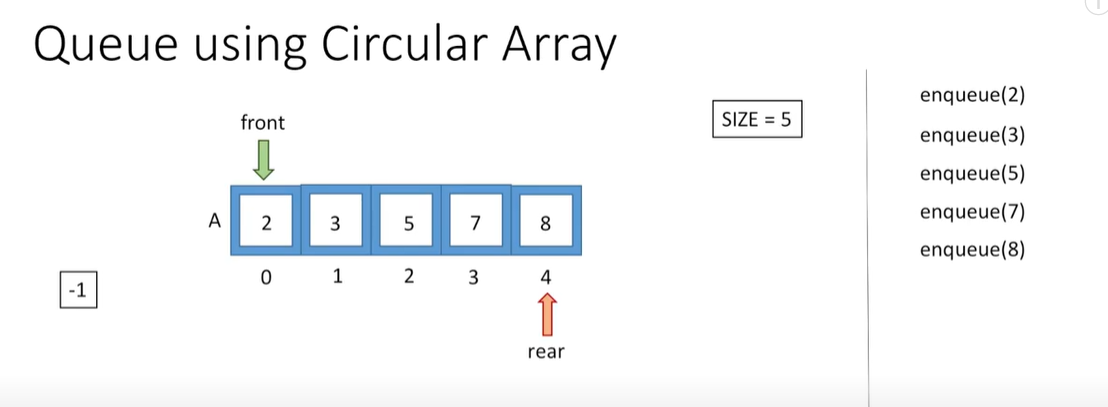
A Circular Queue is a special version of queue where the last element of the queue is connected to the first element of the queue forming a circle.



See initially both front and rear will be at -1 .rear at end where element inserted and front from where element removed.



See when first element inserted the front=rear=0 and insert element. see the position of rear and front after array is full.

A picture containing diagram

Description automatically generated

See after deque we will front ++ position and not consider 2 as part of queue.

Chart, box and whisker chart

Description automatically generated

See now we do dequeue and then enqueue we cannot insert as rear is at end of array.

A picture containing diagram

Description automatically generated

See by using that circular array to insert at index 0 and 1 using %size.

Graphical user interface, text

Description automatically generated

See here 1 issue to see if queue full is rear==front.

Chart, box and whisker chart

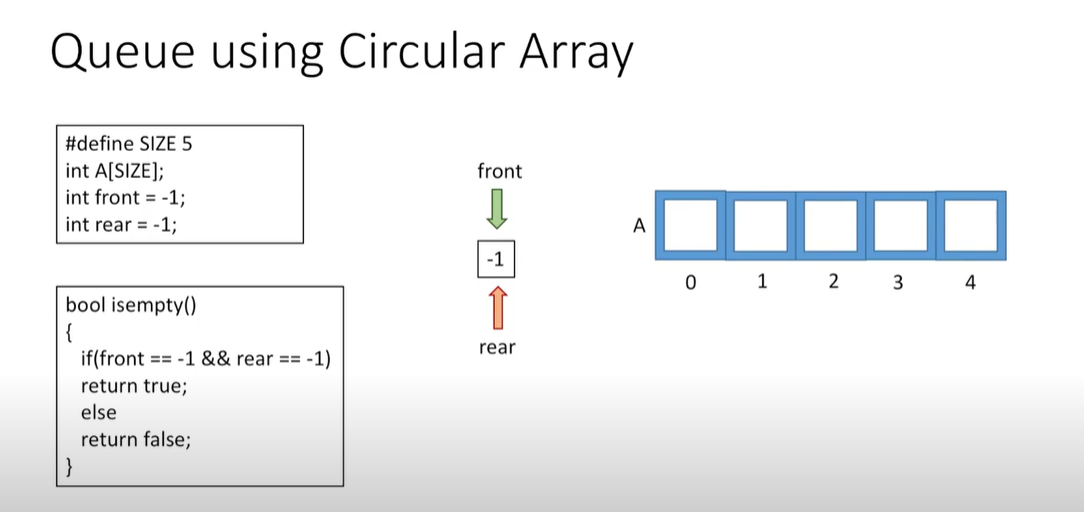
Description automatically generated

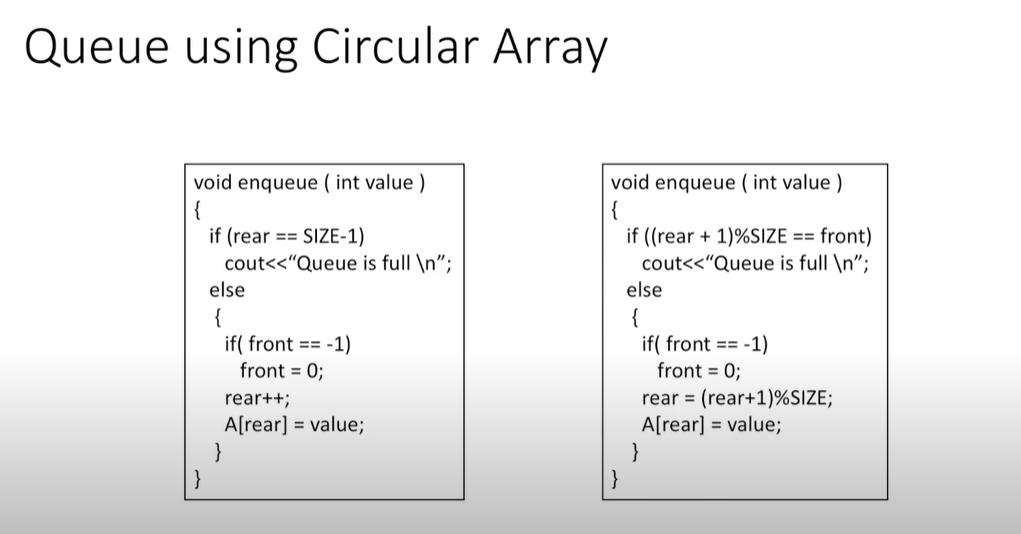
See now we cant insert 11 as rear+1==front.

Table

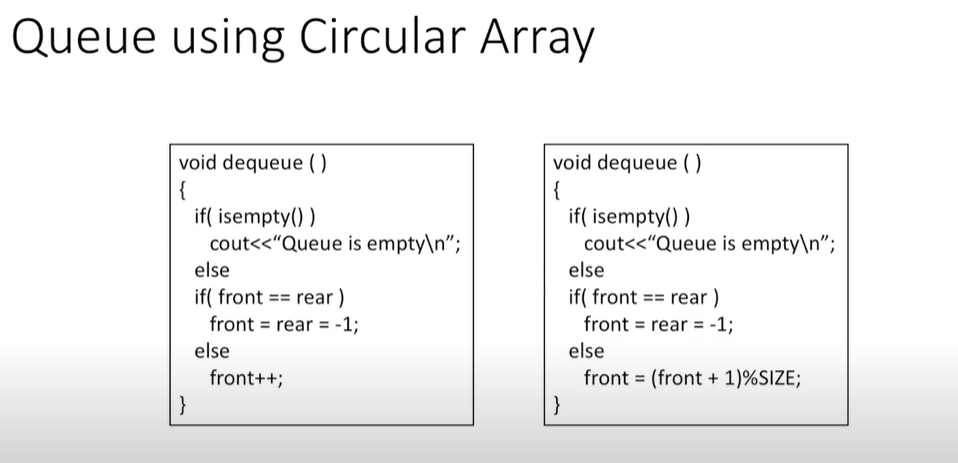
Description automatically generated

Code:





Left is normal queue and right is circular queue.



Left is normal queue and right is circular.

Text, letter

Description automatically generated

Graphical user interface, application, Word

Description automatically generated