

## INITIAL STATE

Empty list: head = null, tail = null

## INSERT AT END (101)

head  $\rightarrow$  [101]  $\leftarrow$  tail

prev = null, next = null

## INSERT AT END (102)

head  $\rightarrow$  [101]  $\leftrightarrow$  [102]  $\leftarrow$  tail

[101]: prev = null, next = 102

[102]: prev = 101, next = null

## INSERT AT BEGINNING CRITICAL PATIENT (200)

head  $\rightarrow$  [200]  $\leftrightarrow$  [101]  $\leftrightarrow$  [102]  $\leftarrow$  tail

[200]: prev = null, next = 101

[101]: prev = 200, next = 102

[102]: prev = 101, next = null

## INSERT AT POSITION (150, 2)

head  $\rightarrow$  [200]  $\leftrightarrow$  [150]  $\leftrightarrow$  [101]  $\leftrightarrow$  [102]  $\leftarrow$  tail

[200]: prev = null, next = 150

[150]: prev = 200, next = 101

[101]: prev = 150, next = 102

[102]: prev = 101, next = null

## DELETE FROM BEGINNING

head  $\rightarrow$  [150]  $\leftrightarrow$  [101]  $\leftrightarrow$  [102]  $\leftarrow$  tail

[150]: prev = null, next = 101

[101]: prev = 150, next = 102

[102]: prev = 101, next = null

## INSERT AT END (300)

head  $\rightarrow$  [150]  $\leftrightarrow$  [101]  $\leftrightarrow$  [102]  $\leftrightarrow$  [300]  $\leftarrow$  tail

[150]: prev = null, next = 101

[101]: prev = 150, next = 102

[102]: prev = 101, next = 300

[300]: prev = 102, next = null