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## **Task#2---- Dry Run**

### **Step 1 : insertAtEnd(101)**

prev      pid      next

NULL <- [101] -> NULL

### **Step 2 : insertAtEnd(102)**

NULL <- [101] <-> [102] -> NULL(101.prev = NULL, 101.next = 102;      102.prev = 101, 102.next = NULL)

### **Step 3 — insertAtBeginning(200)**

NULL <- [200] <-> [101] <-> [102] -> NULL(200.prev = NULL, 200.next = 101; 101.prev = 200, 101.next = 102)

### **Step 4 — insertAtPosition(150, 2)**

NULL <- [200] <-> [150] <-> [101] <-> [102] -> NULL(150.prev = 200, 150.next = 101)

### **Step 5 — deleteFromBeginning()**

Removes head node 200.NULL <- [150] <-> [101] <-> [102] -> NULL

### **Step 6 — insertAtEnd(300)**

NULL <- [150] <-> [101] <-> [102] <-> [300] -> NULL(150.prev = NULL, 150.next = 101; 300.prev = 102, 300.next = NULL)

### **Final Answers:**

a) Head PatientID : 150

b) Tail PatientID: 300

c) List head -> tail (forward traversal): 150 -> 101 -> 102 -> 300

d) List tail -> head (backward traversal): 300 -> 102 -> 101 -> 150