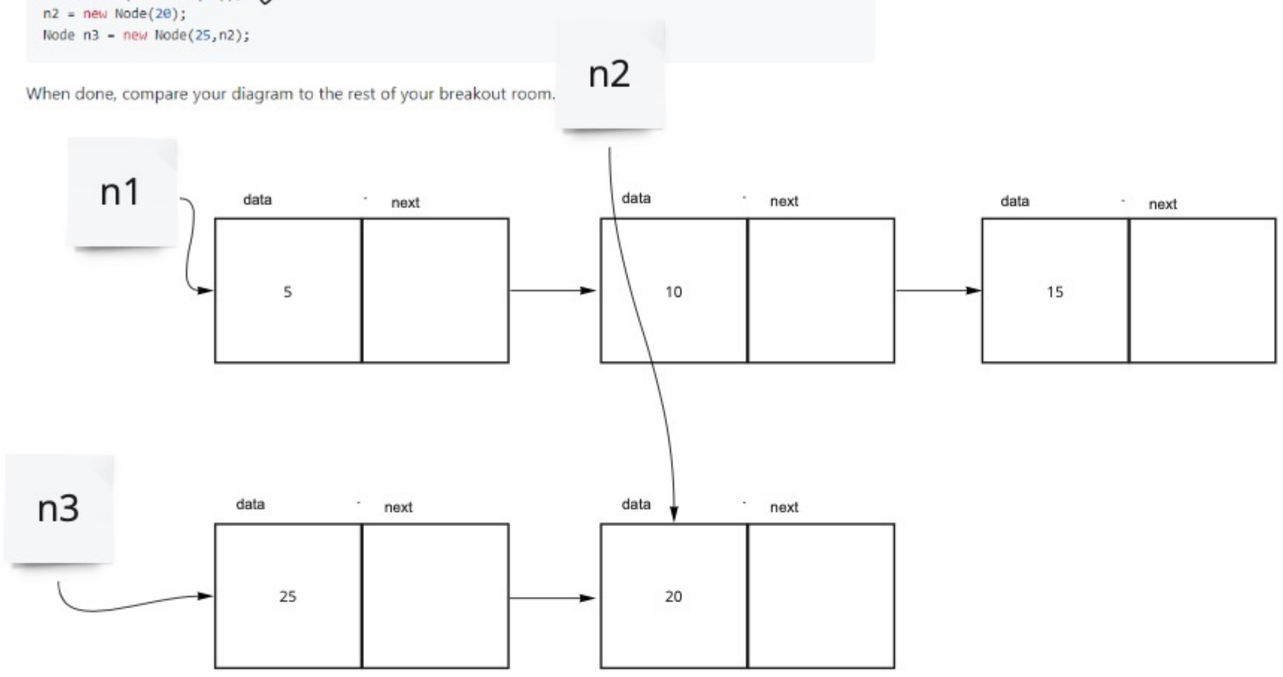
part 1

Using the code for Node.java in this directory, trace through the following code segment one line at a time. As you trace through the code, draw a diagram of the cells and pointers that result.

```
Node n1 = new Node(5);
Node n2 = new Node(10);
n1.setNext(n2);
n2.setNext(new Node(15));
n2 = new Node(20);
Node n3 = new Node(25,n2);
```

When done, compare your diagram to the rest of your breakout room.

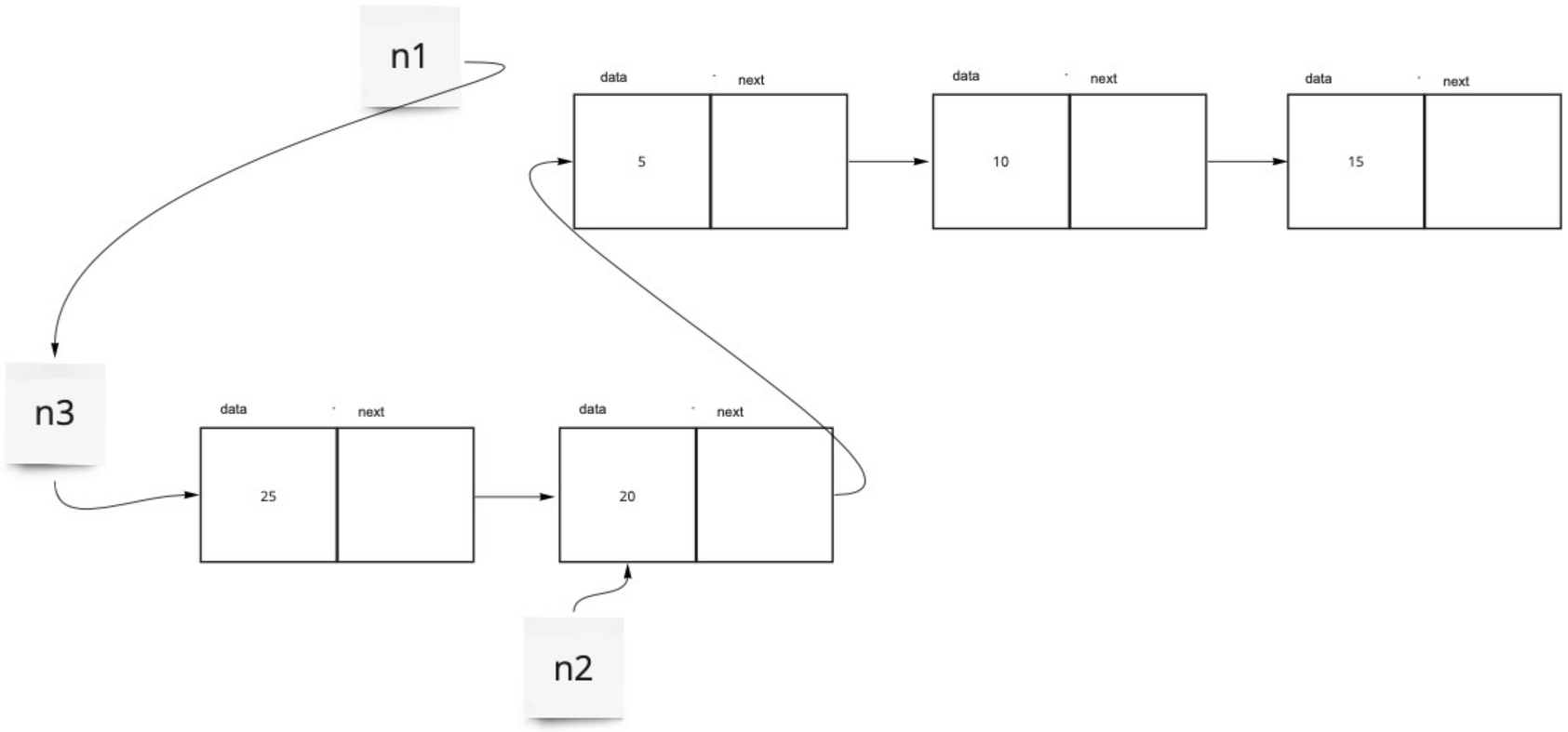


Part 2

Copy over your diagram from part 1 and continue to modify it by tracing through these lines of code:

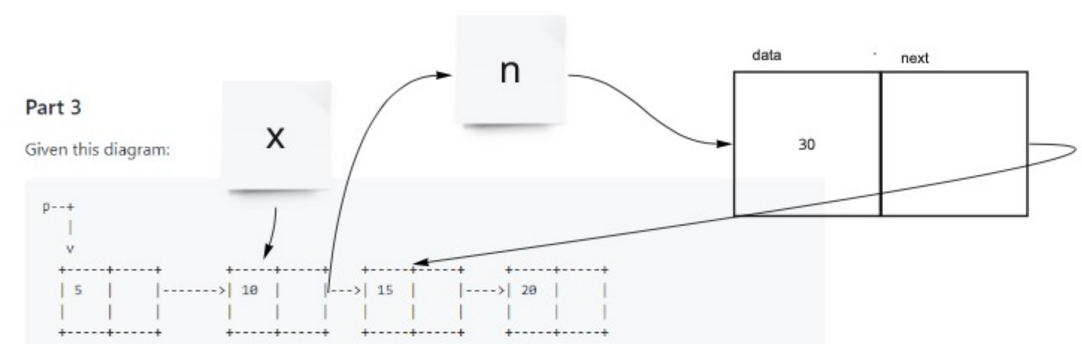
```
n2.setNext(n1);
n1=n3;
```

Once again, share the diagram with your room.



Part 3

Given this diagram:



There already exists a Node variable P which points to (refers to) the node with the 5 in its data.

Write a code fragment to:

1. Create a new Node variable set it to point to the node with the 10 in it.
2. Create a new Node variable and instantiate it to a new Node with a value of 30.
3. Write the code to insert this new Node between the 10 and the 15

```
Node x = p.getNext();

Node n = new Node(30)

p.getNext().setNext(n);
n.setNext(x.getNext())
```