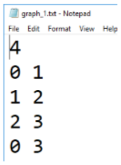
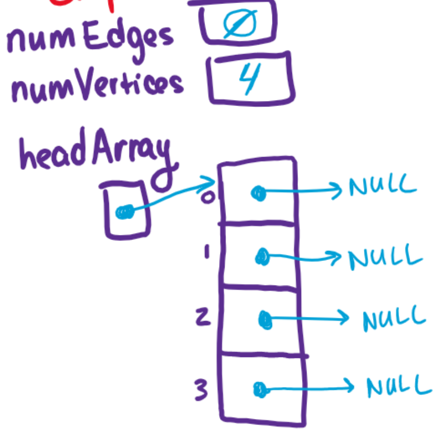
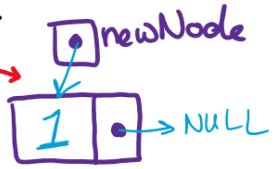


```
4
0 1
1 2
2 3
0 3
```

You have already (before calling addEdge function) created your GraphList object in memory & the constructor is already called. So right now your GraphList looks like this in memory:



So when you call addEdge, it accepts V1 and V2. V1=∅ V2=1

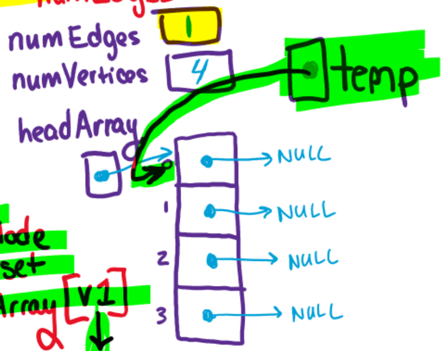


① create a new ListNode

② set value to V2

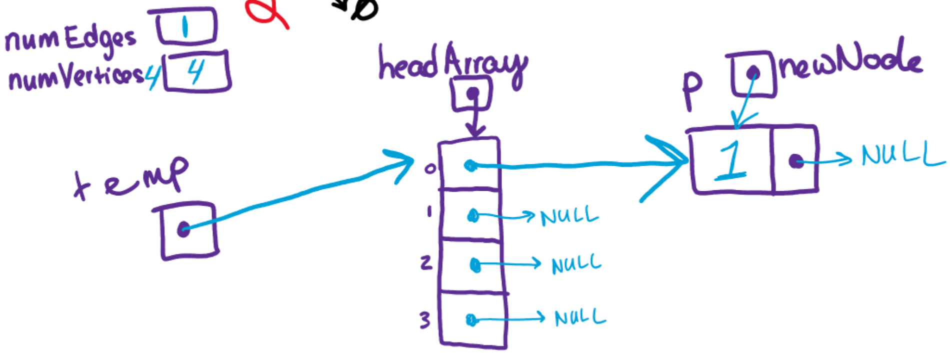
③ set next to NULL

④ increment numEdges



⑤ create a temp ListNode pointer & set it to headArray[V1]
∅

⑥ if temp is NULL (it is) then headArray[V1] = newNode
∅



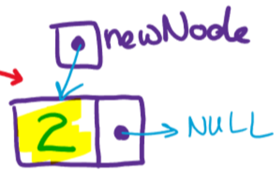
Now, add next edge read fromfile V1=1 V2=2

① create a new ListNode

② set value to V2

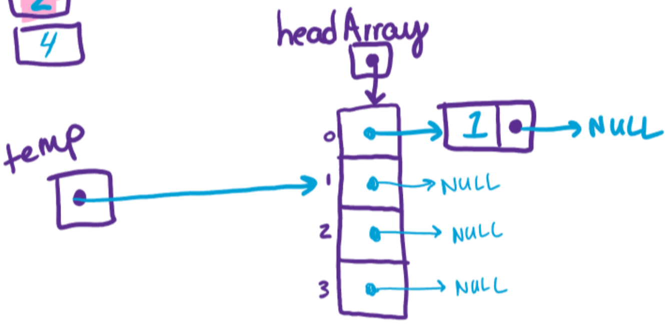
③ set next to NULL

④ increment numEdges



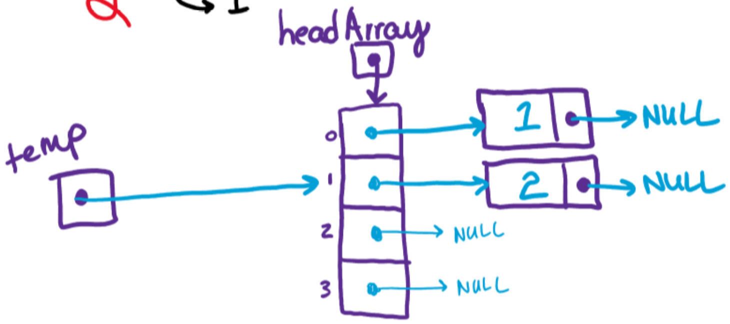
numEdges 2

numVertices 4

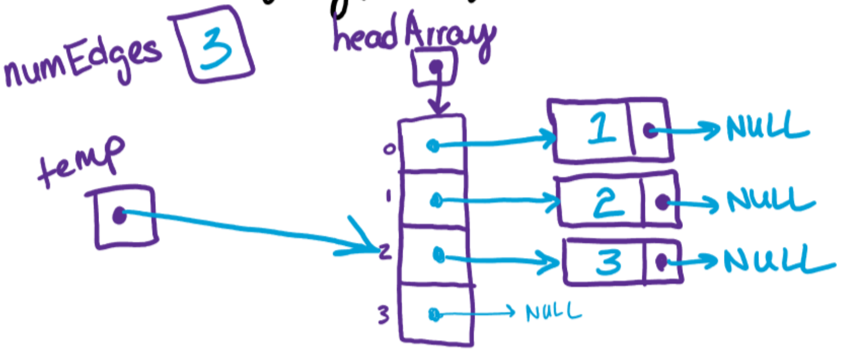


⑤ create a temp ListNode pointer & set it to headArray[V1] → 1

⑥ if temp is NULL (it is) then headArray[V1] = newNode
→ 1

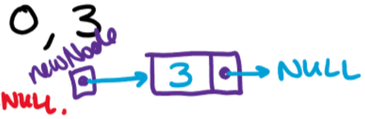


Now add edge 2,3 going through the same steps



Now add last edge, which is 0, 3

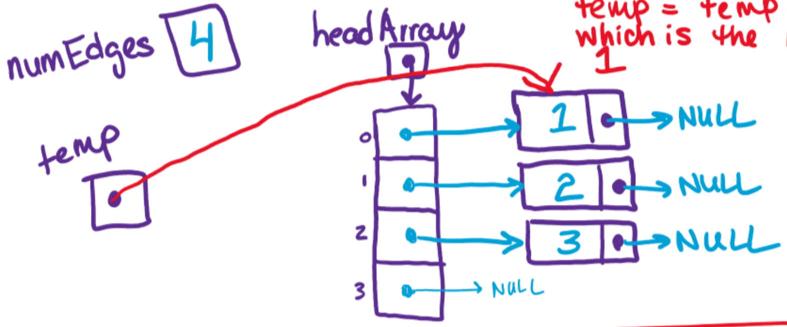
① create new ListNode & set value = v2 & next isNULL.



② increment numEdges

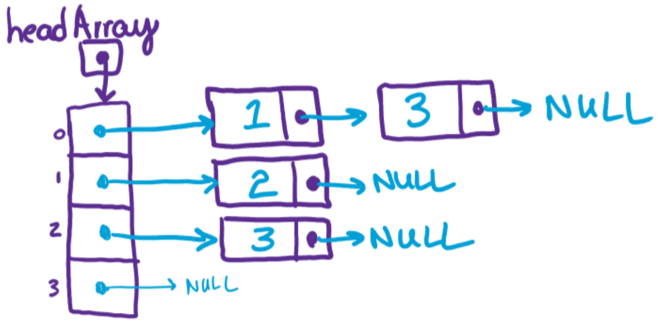
③ set temp ListNode to headArray[v1] ↳ ∅

④ temp is NOT NULL. — so while temp→next != NULL then temp = temp→next, which is the node with 1



Now, temp→next is NULL - so out of loop.

so set temp→next to newNode



DONE!

d