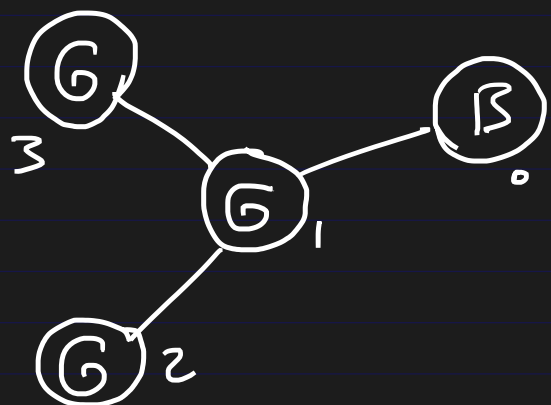


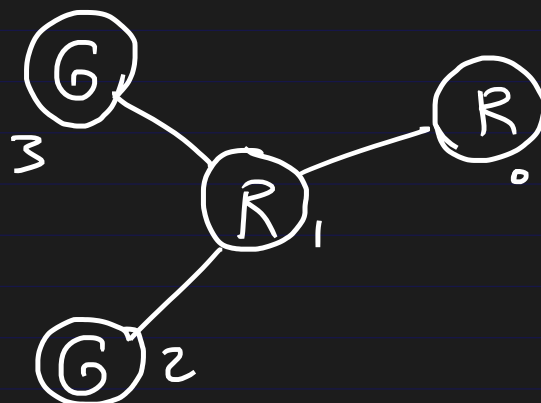
Problem with successor?

initial State
selected Node Id = X

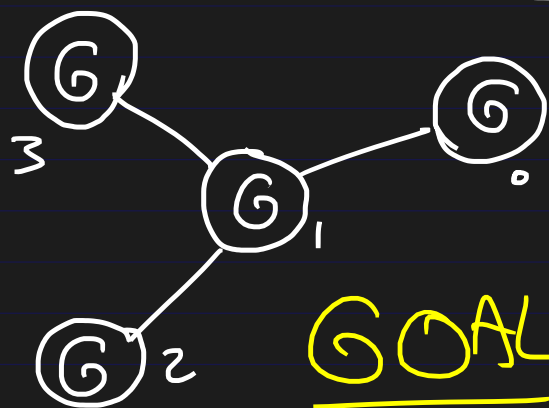


select
Node 0

State #1
selected Node Id = 0



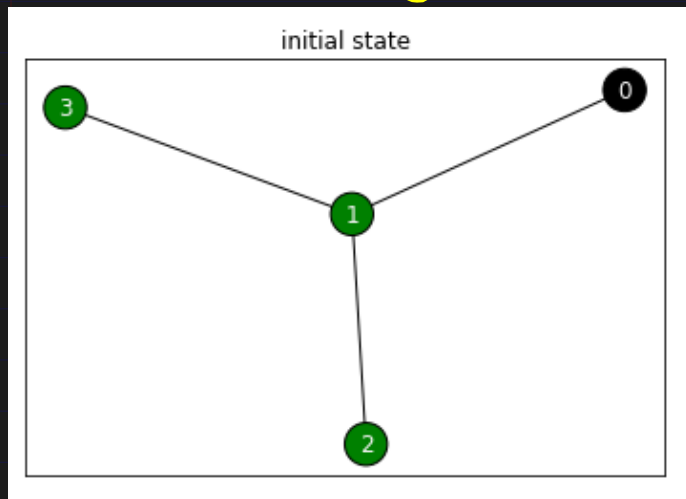
State #2
selected Node Id = 0



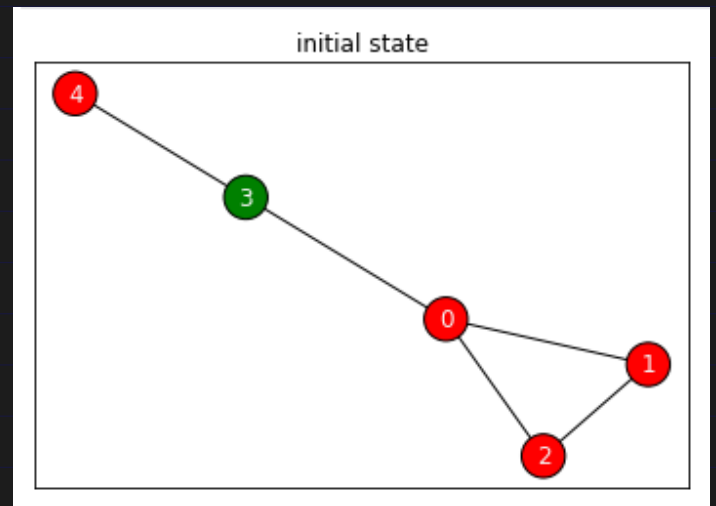
GOAL

select
Node 0
(AGAIN)

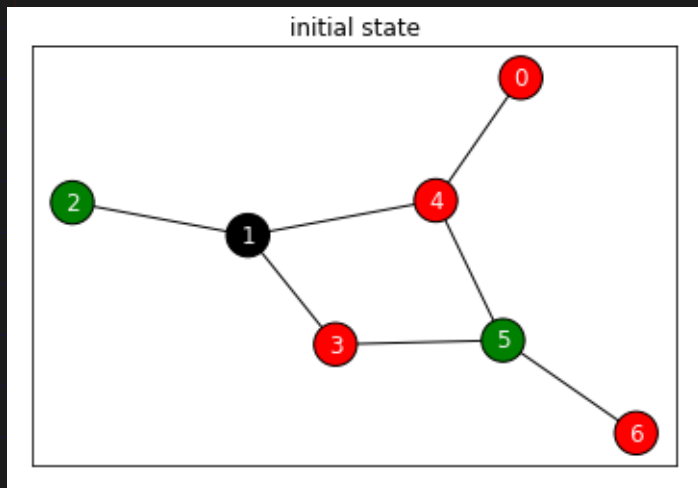
test 0



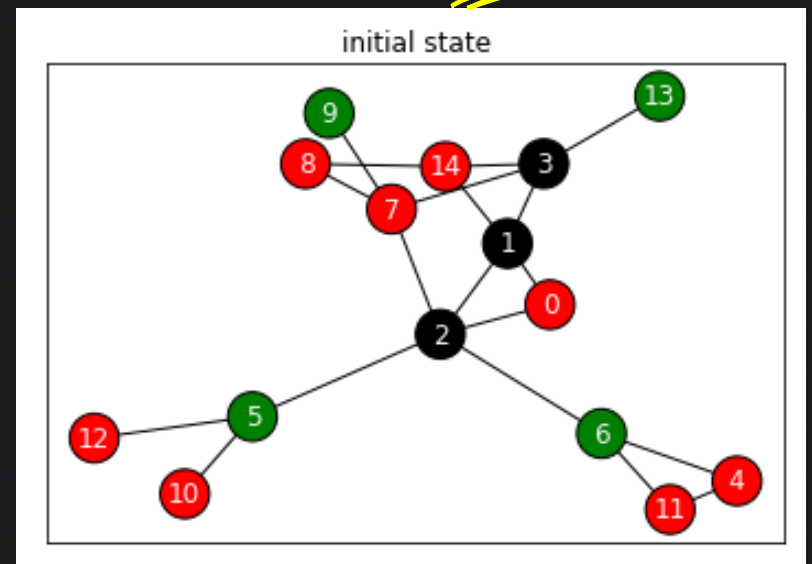
test 1



test 2

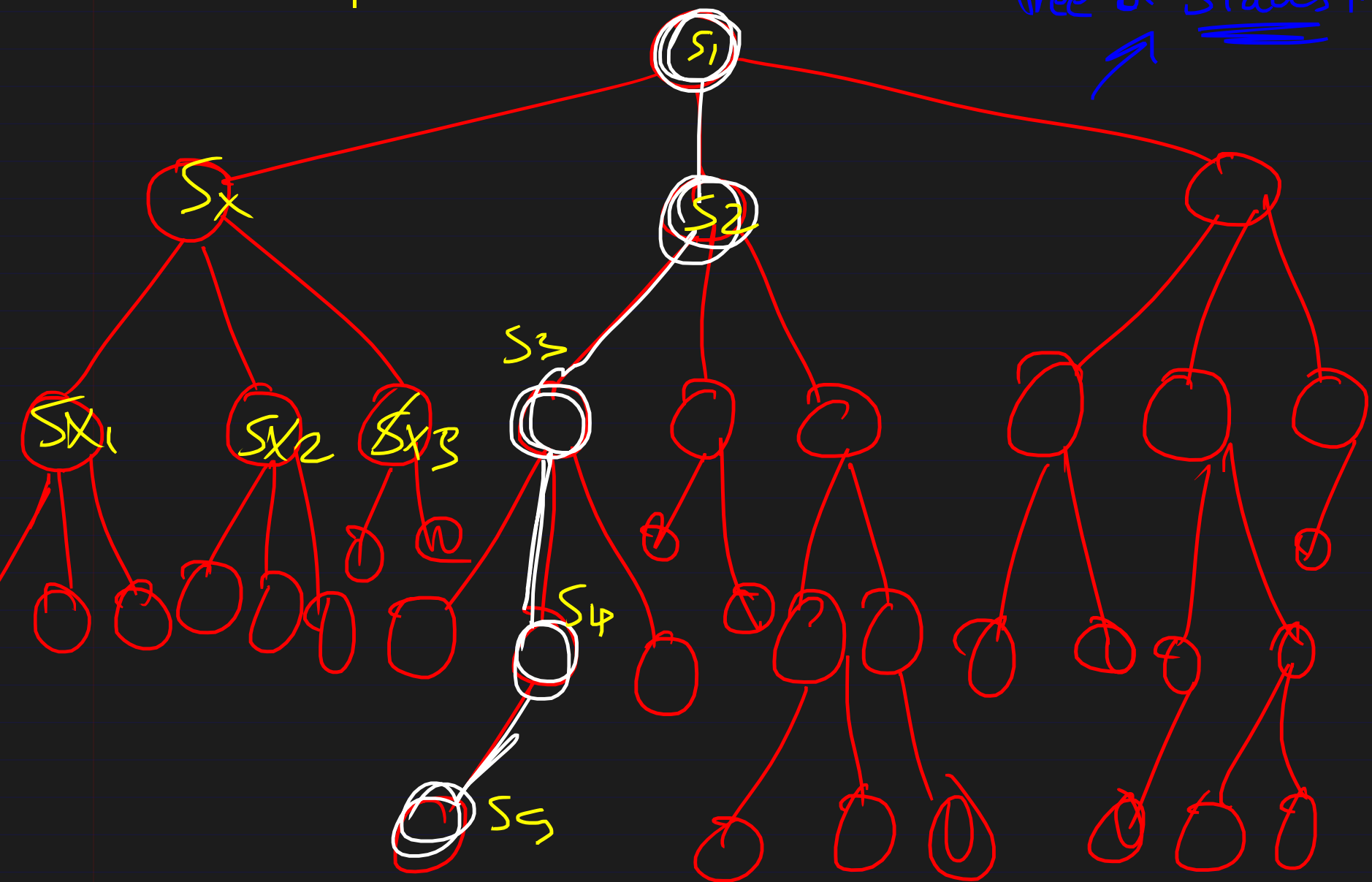


test 3



DFS: Graph Search:

* This is the Tree of States *



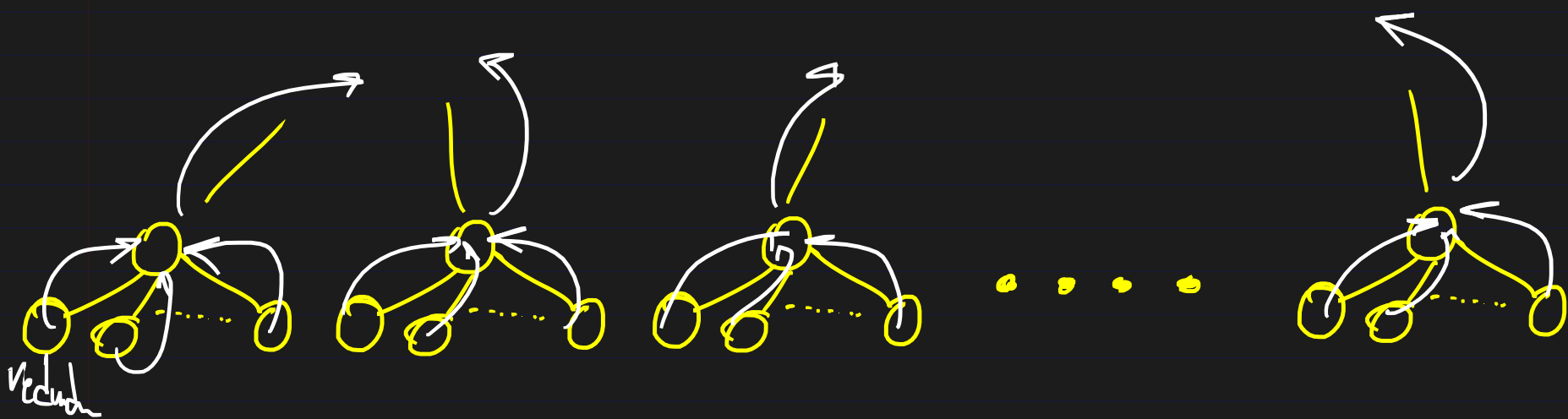
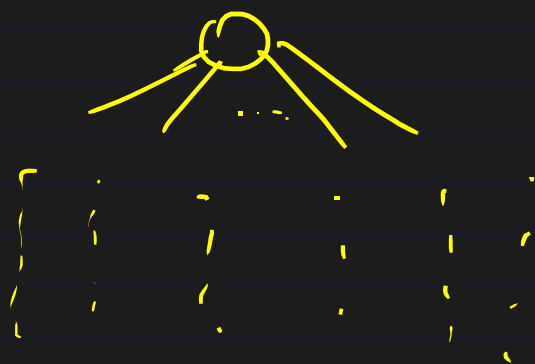
current Tree table

↓
Sx, Sx1, Sx2, ...
are removed

S1	true
S2	true
S3	true
S4	true
S5	true

→ only
keep track of
current tree

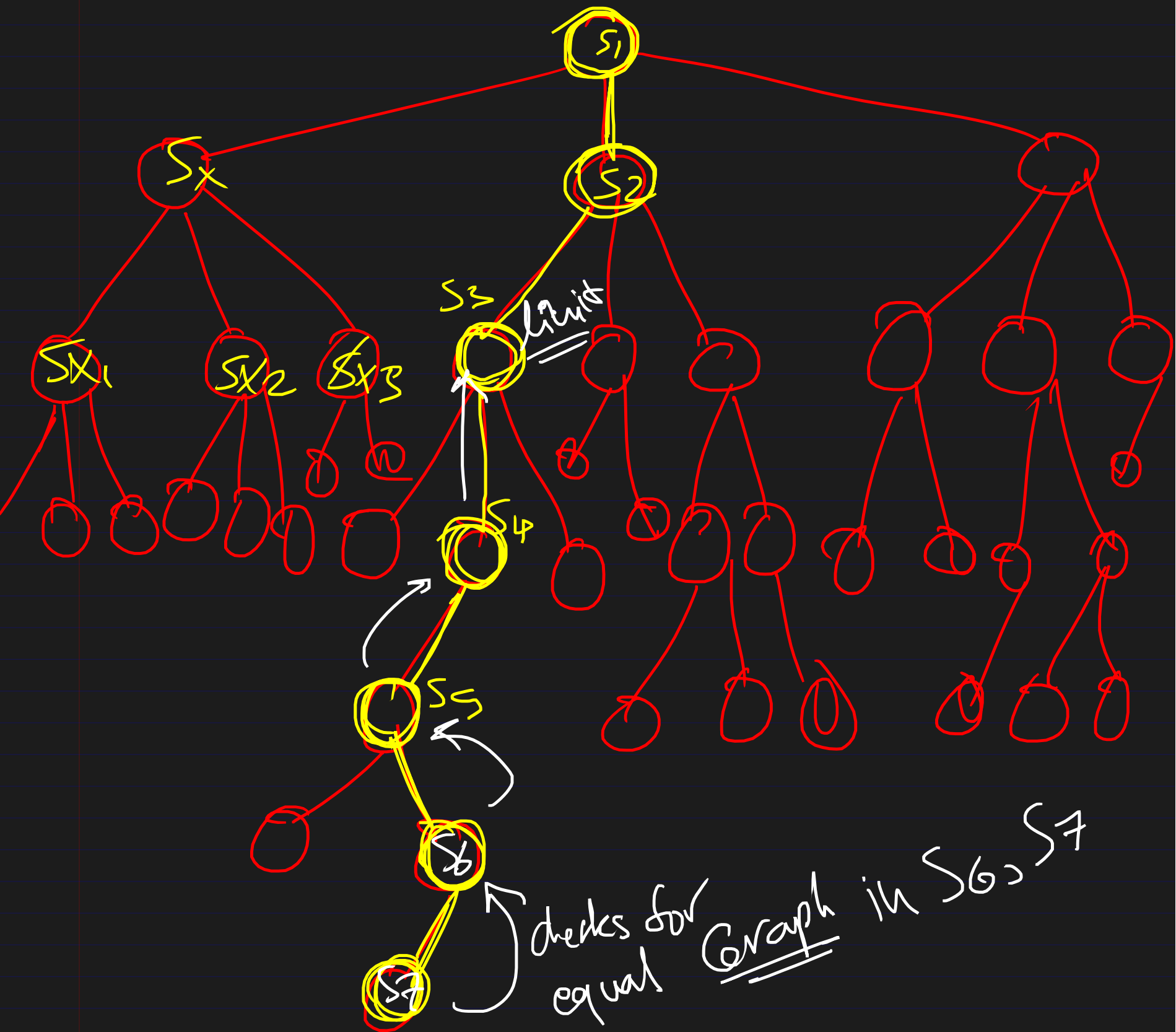
problem with big trees:



for example, test2:

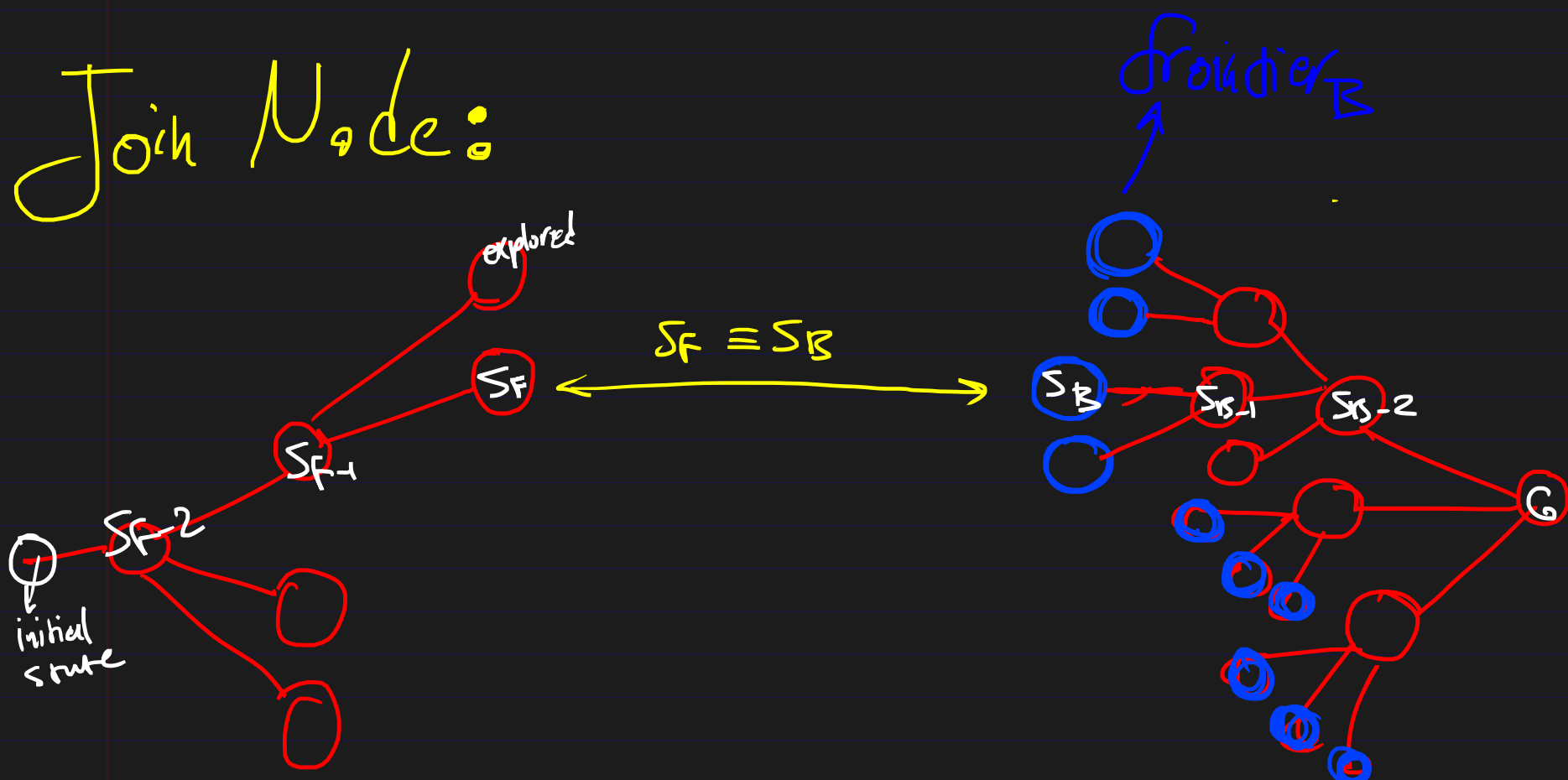
at depth 59-66, too many
redundant states

DFS :: Tree Search :

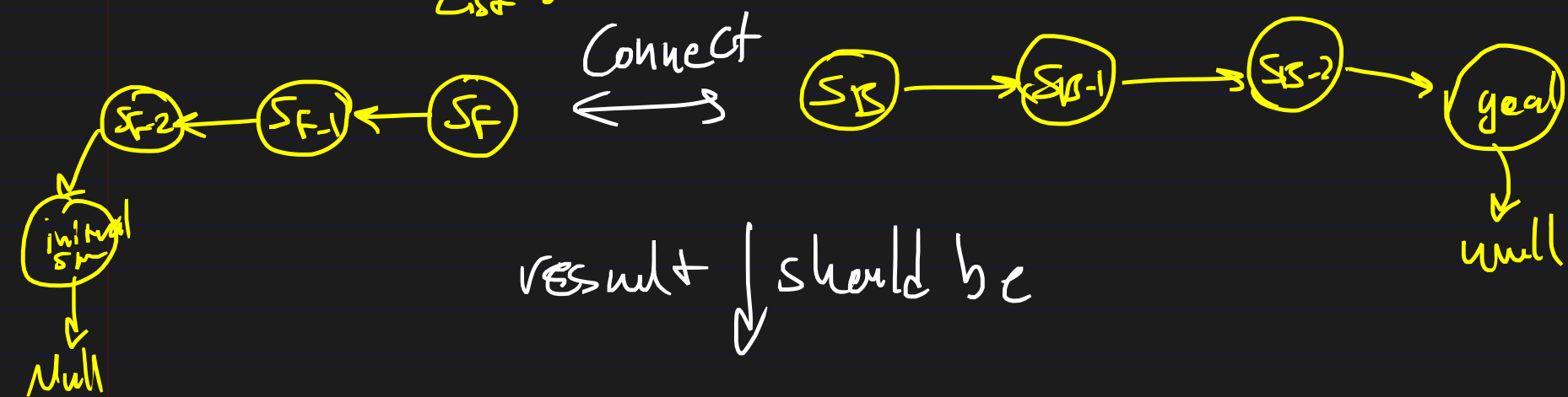


Bidirectional Best first : BIBF

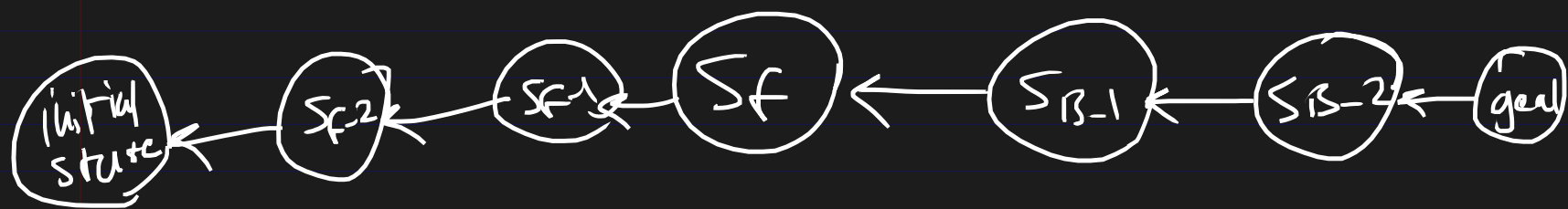
Join Node:



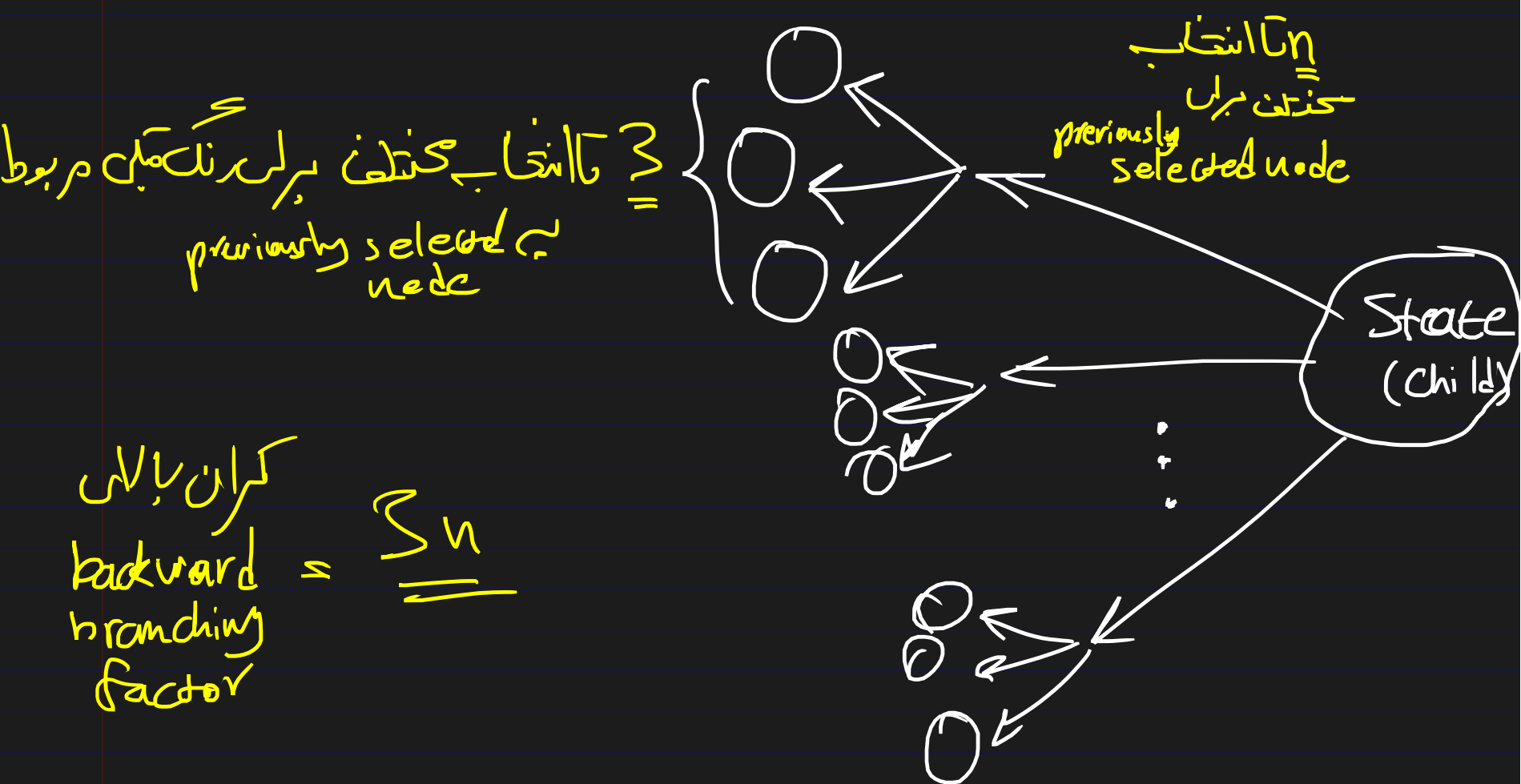
we save states as Linked List :



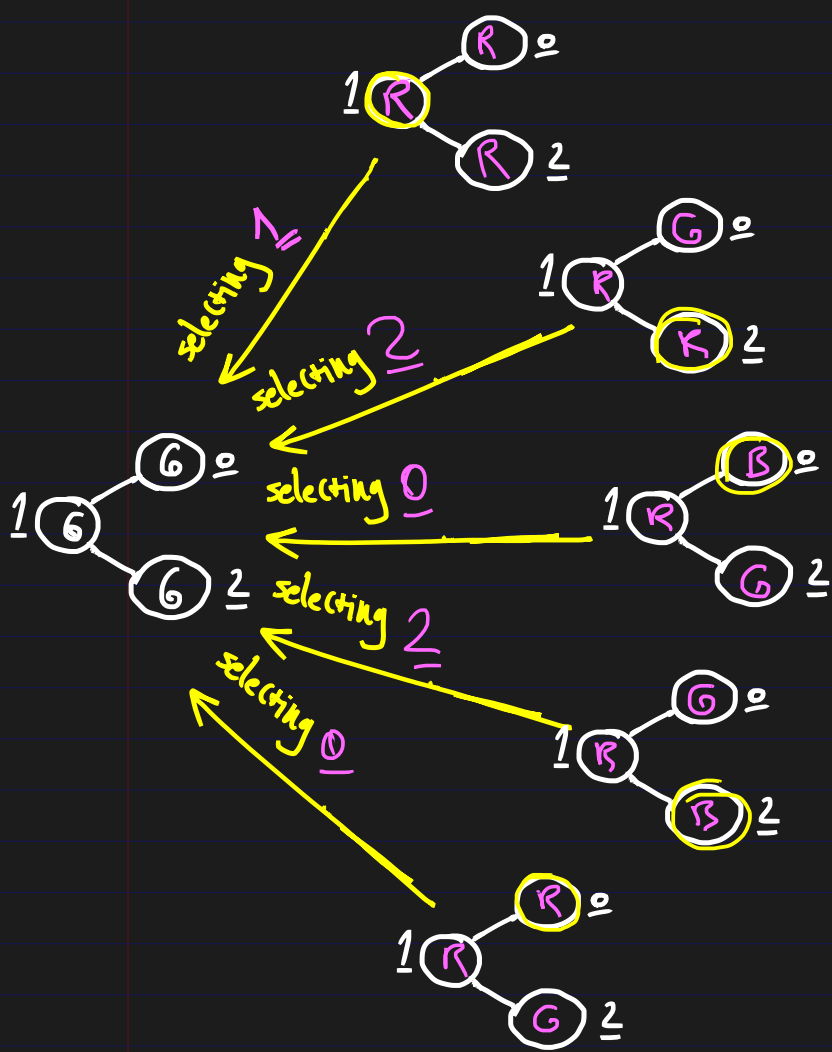
result should be



Backward Successor:

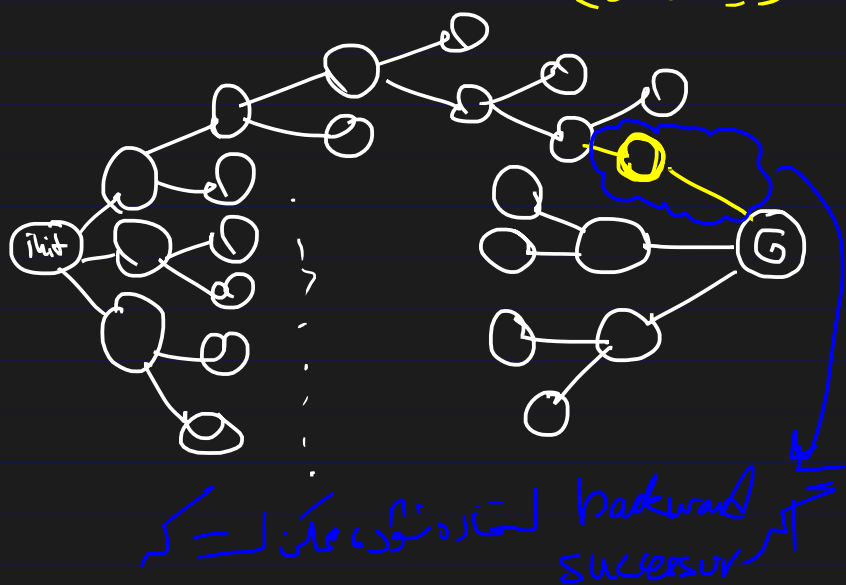


Example:



اگر از forward successor براس backward progress
 انتخاب می شود، پس برگردان
 black node
 برگردان می شود

اگر از successor های (forward) successor
 انتخاب شود، پس برگردان می شود.
 black node
 برگردان می شود



اگر backward successor انتخاب شود، پس برگردان می شود.
 این node از طریق backward انتخاب می شود و forward
 یا BFS یا DFS را دنبال می کند.