### **Search Sequence for Simple Hill Climbing:**

********Initial State******
Q Q Q Q Q_Q Q _Q collisions = 2
     <b>V</b>
QQ Q Q Q_Q QQ Q
collisions = 1
V *****Reached plateau/Local Minima State****
Q

Q_
Q
Q
_Q
QQ
W
collisions = 1
*********Initial State******
initial State
Q
QQ
$Q_{-}Q_{-}Q_{-}$
_Q
$Q_{}Q_{}$
·
collisions = 8
comsions – o
V
Q
Q
QQ
Q_
0
_Q
$Q_{}Q_{}$
collisions = 5



$$Q_{Q}_{---}$$
  
 $Q_{Q}_{--}$   
 $Q_{Q}_{--}$ 



$$\overline{Q}_{-}Q_{-}$$



_Q_Q
Q_
Q
collisions = 2
i
$\mathbf{v}$
Q
Q
Q
Q
 _Q_Q
Q_
Q
collisions = 1
Comstons
$\mathbf{v}$
******Reached plateau/Local Minima State****
Reacticu plateau/Locai Millilla State
Q
Q
Q
Q
Q
Q_
Q
×
collisions = 1

*********Initial State******
Q _Q 
QQ QQQ
collisions = 6
   <b>V</b>
Q _Q
Q Q
QQ QQ
collisions = 3
     <b>V</b>
Q _Q
Q Q Q

\_\_\_Q\_\_\_\_

collisions = 2
     V
Q _Q Q Q Q Q
collisions = 1
V ******Reached plateau/Local Minima State****
Q
Q Q Q QQ Q Q
collisions = 1

Q _Q Q Q_Q Q QQ
collisions = 6
Q Q Q Q Q Q collisions = 4
comsions – 4
       V
Q _Q Q Q Q Q

\_\_\_\_Q\_\_ \_Q\_\_\_\_

\_\_\_\_\_ Q\_\_\_\_Q\_

\_\_\_Q\_\_\_\_Q

#### collisions = 2



\*\*\*\*\*Goal State\*\*\*\*\*

\_\_\_\_Q\_\_ \_Q\_\_\_\_

\_\_\_\_Q\_ Q\_\_\_\_\_

\_\_\_Q\_\_\_\_ \_\_\_\_Q\_\_\_\_

\_\_\_Q\_\_\_

## Search Sequence for Hill Climbing with sideways moves:

*********Initial State*******
Q_
 Q
Q _QQQ
 Q Q
collisions = 8
     <b>V</b>
Q_
Q_Q Q
QQ
Q Q
collisions = 4
     <b>V</b>
Q_

V *****Goal State*****
Q Q Q Q Q Q
collisions = 0
********Initial State*******
Q_Q Q_Q QQ_   Q
collisions = 14
     <b>V</b>
Q_Q Q_Q Q Q_





_Q
collisions = 1
   <b>V</b>
Q Q Q Q Q Q _
collisions = 1
QQ Q Q Q Q Q
collisions = 1
     <b>V</b>
Q

\_\_\_\_Q \_\_\_\_Q\_\_\_\_













_Q
collisions = 1
QQ _Q Q Q Q _Q Q
collisions = 1
   <b>V</b>
QQ QQ Q Q Q
collisions = 1
   <b>V</b>
Q

\_\_\_\_Q\_\_\_\_\_Q

\_\_\_\_Q\_\_\_\_ \_Q\_\_\_\_\_







Q
Q
Q
_Q
collisions = 1
1
$\mathbf{V}$
·
Q
Q
Q_
Q
Q
Q
$_{Q}_{Q}$
collisions = 1
V
\$\$\$\$\$\doldred{C_1}C_1_1\doldred{C_1}\$\$
*****Goal State*****
*****Goal State*****
Q
Q Q
Q Q Q
Q Q Q
Q Q Q Q Q
Q Q Q Q Q
Q Q Q Q QQ Q
Q Q Q Q Q
Q
Q Q Q Q QQ Q
Q

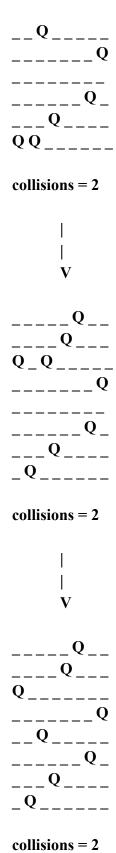
\*\*\*\*\*\*\*\*\*Initial State\*\*\*\*\*\*\* Q\_\_\_\_\_ \_\_\_\_\_Q \_Q\_Q\_Q\_Q \_\_\_\_\_ \_\_\_\_Q\_Q\_ \_\_Q\_\_\_\_ collisions = 9 \_\_\_\_Q\_\_ Q\_\_\_\_\_ \_\_\_\_Q \_Q\_Q\_\_\_Q \_\_\_\_\_ \_\_\_\_Q\_Q\_ \_\_Q\_\_\_\_ collisions = 5\_Q\_\_\_\_ \_\_\_\_Q\_\_

 $\boldsymbol{Q}_{----}$ 

\_\_\_Q\_\_\_Q

_Q
Q
Q_
Q
Q
Q
Q
Q
collisions = 1
I
V
_QQ
Q_
Q
Q
Q
Q Q
<
collisions = 1
İ
$\mathbf{V}$
*****Goal State*****
Q
_Q
Q_
Q Q
Q
Q
Q

# collisions = 0\*\*\*\*\*\*\*\*\*Initial State\*\*\*\*\*\* \_\_\_\_\_ $Q_{--}$ \_\_Q\_\_Q\_\_ \_\_\_\_\_ \_\_\_\_\_ $\_\_\_\_Q\_$ $Q_{--}Q_{-}Q$ Q Q \_ \_ \_ \_ collisions = 6 \_\_\_\_Q\_\_ \_\_\_\_Q\_\_\_ \_\_Q\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_Q\_ \_\_\_Q\_\_\_Q Q Q \_\_\_\_\_ collisions = 4 \_\_\_\_Q\_\_















#### collisions = 1



#### collisions = 1

\_Q\_\_\_\_









collisions = 1



$$\begin{matrix} Q_{----} \\ ---Q_{--} \\ Q \end{matrix}$$







#### collisions = 1





















# collisions = 1



# collisions = 1

\_Q\_\_\_\_









collisions = 1



$$\begin{matrix} Q_{----} \\ ---Q_{--} \\ Q \end{matrix}$$







# collisions = 1

\_Q\_\_\_\_





















# collisions = 1



# collisions = 1

\_Q\_\_\_\_









collisions = 1



$$\begin{matrix} Q_{----} \\ ---Q_{--} \\ Q \end{matrix}$$







# collisions = 1





















# collisions = 1



# collisions = 1

\_Q\_\_\_\_









collisions = 1



$$\begin{matrix} Q_{----} \\ ---Q_{--} \\ Q \end{matrix}$$







# collisions = 1





Q
Q
Q
Q_ Q
collisions = 1
I
$\mathbf{V}$
*****Reached plateau/Local Minima State****
Q
Q
Q_Q
Q
Q_
Q
_Q
collisions = 1