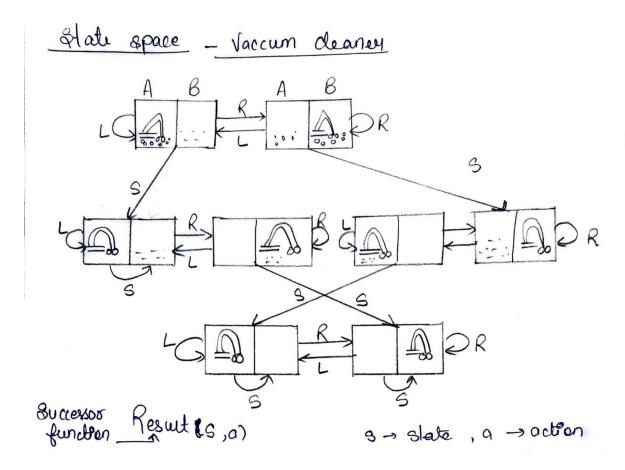
LAB PROGRAM 4

Implement vaccum cleaner agent.



```
Pse volocode :
      del vaccium-deaner god (boatter, status).
x,y= location
           ruturn for the vacuum deanir is at ({x}, {y}) and it is
         olledy. Cleaning."

else:

welvon f" The vacuum cleaner is at ({xx}, {y} and $ in
                              solute queves
             clean. Moury."
 slatus = [[, Dialy, 'clean], [ Dialy's, Dialy']
      bocation = (0,0)
    of state light of m vierled; operations
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     turan perind (action) 1 + truco stola
         of status [x][y]== Clean;
            if slatus [0](0) = = ' clean' and slatus [0](1) = = 'clean'
            and status [17[0] == ! clean and status [17[1] == !clean!
               "puind (" All clocathers are clean }
               break
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          ell archiones 12x 3m
```

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Code:

```
def vacuum_cleaner_agent(location, status):
  x, y = location
  if status[x][y] == 'Dirty':
     return f"The vacuum cleaner is at (\{x\}, \{y\}) and it is dirty. Cleaning."
  else:
     return f"The vacuum cleaner is at (\{x\}, \{y\}) and it is clean. Moving."
status = [['Dirty', 'Clean'], ['Dirty', 'Dirty']]
location = (0, 0)
while True:
  action = vacuum_cleaner_agent(location, status)
  print(action)
  x, y = location
  if status[x][y] == 'Dirty':
     status[x][y] = 'Clean'
  if status[0][0] == 'Clean' and status[0][1] == 'Clean' and status[1][0] == 'Clean' and
status[1][1] == 'Clean':
     print("All locations are clean. The vacuum cleaner is finished.")
     break
  if y < 1:
     location = (x, y + 1)
  elif x < 1:
     location = (x + 1, 0)
```

Output:

```
\rightarrow The vacuum cleaner is at (0, 0) and it is dirty. Cleaning.
    The vacuum cleaner is at (0, 1) and it is clean. Moving.
    The vacuum cleaner is at (1, 0) and it is dirty. Cleaning.
    The vacuum cleaner is at (1, 1) and it is dirty. Cleaning.
    All locations are clean. The vacuum cleaner is finished.
```

Start coding or <u>generate</u> with AI.