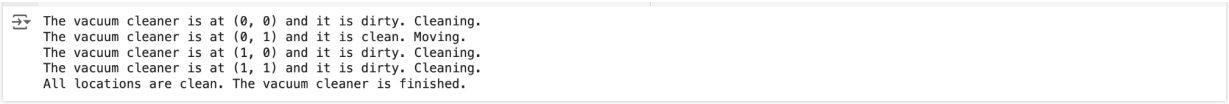
VACUUM CLEANER

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:



```
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.
```