VACUUM CLEANER(SIMPLE REFLEX)

```
def clean(floor):
    row = len(floor)
    col = len(floor[0])
    for i in range(0, row):
        if(i%2 == 0):
            for j in range(0, col):
                if(floor[i][j] == 1):
                    print("Status : Dirty")
                    print_floor(floor, i, j)
                    floor[i][j] = 0
                    print("Cleaned")
                    print_floor(floor, i, j)
                else:
                    print("Status : Clean")
                    print_floor(floor, i, j)

        else:
            for j in range(col-1, -1, -1):
                if(floor[i][j] == 1):
                    print("status : Dirty")
                    print_floor(floor, i, j)
                    floor[i][j] = 0
                    print("Cleaned")
                    print_floor(floor, i, j)
                else:
                    print("Status : Clean)
                    print_floor(floor, i, j)

    print("Status : all states Cleaned")

def print_floor(floor, row, col):
    for i in range(0, len(floor)):
        for j in range(0, len(floor[0])):
            if(i == row and j == col):
                print(f"|{floor[i][j]}|", end=" ")
            else:
                print(f" {floor[i][j]} ", end=" ")
        print(end='\n')
    print(end='\n')


def main():
    print("Enter no. of rows")
    m = int(input())
    print("Enter no.of columns")
    n = int(input())
    floor = []
    for i in range(0, m):
        a = list(map(int, input().split(" ")))
        floor.append(a)
    print()
    clean(floor)
```

OUTPUT

```
main()

Enter no. of rows
2
Enter no. of columns
3
1 0 1
1 1 0

Status : Dirty:
|1|  0   1
 1   1   0

Cleaned
|0|  0   1
 1   1   0

Status : Clean
 0  |0|  1
 1   1   0

Status : Dirty:
 0   0  |1|
 1   1   0

Cleaned
 0   0  |0|
 1   1   0

Status : Clean
 0   0   0
 1   1  |0|

status : Dirty
 0   0   0
 1  |1|  0

Cleaned
 0   0   0
 1  |0|  0

status : Dirty
 0   0   0
|1|  0   0

Cleaned
 0   0   0
|0|  0   0

Status : all states Cleaned
```