class VacuumCleaner:

def \_\_init\_\_(self, environment):

self.environment = environment

self.position = [0, 0] # Initial position (0, 0)

def clean(self):

for row in range(2): # Loop through the rows

for col in range(2): # Loop through the columns

self.position = [row, col]

if self.environment[row][col] == 'dirty':

print(f"Cleaning position: {self.position}")

self.environment[row][col] = 'clean'

else:

print(f"Position {self.position} is already clean.")

print("Cleaning completed!")

# Define the environment (2x2 grid, either 'clean' or 'dirty')

environment = [['dirty', 'clean'],

['dirty', 'dirty']]

vacuum = VacuumCleaner(environment)

vacuum.clean()

Output:

