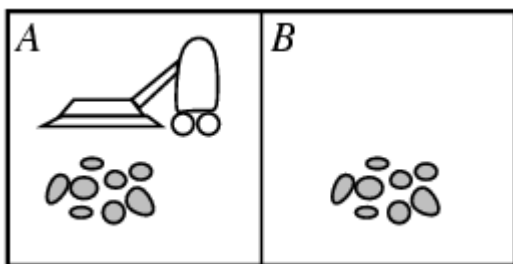


For Lab-3 session:

Extend your LAB-2 by making autonomous cleaner so that it decides itself to clean, move to etc.

So, Write a python code that does not receive the command from user but autonomously clean the environment and stop. Your program has the method **randomGenState()** to generate random state and the method **run()** to run the entire program.



Example of running

```
# random generation
>>> A,B,Agent=randomGenState()
>>> A,B
(1,1)
# 1 stands for the location is dirty , 0 means
clean
>>> Agent
'A'
# Agent is at the location A or B

>>> run()
Agent starts
State (1,1,A)
it cleans A
it goes right
it cleans B
it stops
State (0,0,B)
```

#Another example of running

a random process gives A and B

```
>>> A,B,Agent = randomGenState()
```

```
>>> A,B
```

```
(1,0)
```

```
>>> Agent
```

```
'B'
```

Agent is at the location B

```
>>> run()
```

Agent starts

State(1,0,B)

it goes left

it cleans A

it stops

State(0,0,A)

Extend your model work with 2x2 grid as follow:

A	B
C	D