

# Vacuum cleaner Agent

## Algorithm

Vacuum\_world():

initialize the goal state has A:0, B:0

initialize cost = 0

take location input

take status input

take complement status input

print(initial location condition)

if location input == 'A' then

print(Vacuum placed in Location A)

if status input == 1 then

print(Location A is Dirty)

goal\_state['A'] = '0'

cost += 1

print(Cost for cleaning A)

print(Location A has been cleaned)

if complement status input == 1 then

print location B is empty

print(Moving right to location B)

cost += 1

print cost for <sup>moving</sup> cleaning B

then make goal\_state['B'] = '0'

cost += 1

print Cost for Sucking

print location B is cleaned



Else do

print No action

print Location B is already clean.

else do

print Vacuum is placed in location B

if Status input == '1' do

print Location B is Dirty

goal-state['B'] = '0'

cost += 1

print cost for cleaning

print Location B is cleaned

if Complement<sup>input</sup> status == '1' do

print Location A is dirty

print moving to left of location A

cost += 1

print cost of moving

goal-state['A'] = '0'

cost += 1

print cost for cleaning

print Location A is cleaned

else do

print Location A is already clean

else do

print Location B is already clean.

if complement input == 1 do

print Location A is Dirty

print Moving LEFT to Location A

cost += 1

print Cost for Moving Left

cost  $t=1$

print location A has been cleared

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print No action
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print location, A is already clean

print performance measure

