

3) Design the Model based Vacuum cleaner agent for the following Scenario:

a) Environment is only left and right location where the whole area is divided into two equal halves.

b) The agent should remember if it has cleared the same area twice, then it has to not clean the same area for the third time and for each percept, display action given out by the agent

Code:

if location\_input == 'A':

Print ("Present in location A")

if status\_input == '1':

Print ("Location A is dirty")

goat-Status ['A'] = '0'

Cost += 1

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Print("Cost for cleaning A" + str(Cost))

Print("Location A has been cleaned")

if Status-input-other == '1':

Print("Location B is dirty")

Print("moving right to the location B")

Cost += 1

Print("Cost for cleaning B" + str(Cost))

goat-Status ['B'] = 0

Cost += 1

Print("Cost for Suck" + str(Cost))

Print("Location has been cleaned")

else

Print("No action" + str(Cost))

Print("Location B has been cleaned")

if input-Status if Status-input == '0':

print("Location A is already clean")

if Status-input-other == '1':

(2)

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```
Print("Location B is dirty")
Print("moving right to the location B")
cost += 1
Print("cost for moving right" + str(cost))
goal-state ['B'] = 0
cost += 1
Print("Location B has been cleaned")
else
Print("Vacuum is placed in location B")
if status-input == '1':
Print("location B is dirty")
if status-input != '1':    goal-state ['B'] = 0
Print(("location B is dirty") cost += 1
Print("location B has been cleaned")
if status-input - other == '1':
Print("Location A is dirty")
Print("moving left to the location A")
cost += 1
Print("cost for moving left" + str(cost)) (3)
```



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

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Cost += 1

Print ("Cost for Suck" + Str(Cost))

Print ("location A has been cleaned")

else

print (Cost)

Print ("location B is already clean")

if Status-input-other == '1':

Print ("location A is dirty.")

Print ("moving left to the location A")

Cost += 1

Print ("location A has been cleaned")

else

print ("No action" + Str(Cost))

Print ("location A is already clean")