

10/11/2020

Tuesday

20CS5PCAIP

Lab Test - 1

Artificial Intelligence

Whiteup

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18M18CS019

UG - CSE

5th sem

A section

A¹ batch

Model based agent. Vacuum cleaner

```
def print_floor ( floor, row, col):
```

```
    print ("The floor is: ")
```

```
    for r in range (len(floor):
```

```
        for c in range (len (floor[0]))
```

```
            if r==row and c==col:
```

```
                print (f" >{floor[r][c]} < ", end=" ")
```

```
            else
```

```
                print (f" {floor[r][c]} ", end=" ")
```

```
        print (a)
```

```
    print ()
```

a)

```
def clean ( position):
```

```
    moveLeft = moveRight = False
```

```
    if position.data == 'Left':
```

```
        if position.status == 'Clean':
```

```
            moveRight = True
```

```
            print ("Moving Right")
```

```
        else
```

```
            print ("cleaning")
```

```
            position.status = 'clean' ①
```

```
    else
```

```
        if position.status == 'clean':
```

```
            moveLeft = True
```

```
            print ("Moving Right")
```

```
        else
```

```
            print ("cleaning....")
```

```
            position.status = 'Clean'
```

②

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b] def clean_2(position) :

~~position = {}~~

current_pos = position.data

last_pos = []

~~while True~~

while True :

if position.data == 'Left'

if position.status == 'clean' :

move Right = True

else

print('cleaning...')

last_pos.append(position.data, status)

else

if position.status == 'clean' :

move Left = True

else

print('cleaning...')

position.status = 'clean'

last_pos.append(position.data, status)

if len(last_pos[position.data]) > 2)

print('Already cleaned')

break