Date __/__/__
Page 7

LAB 2

Vacuum cleaner

Algorithm.

1) Create 2 rooms using classes

```
class room:
    def __init__(self, a):
        self.state = a
    def suck(self):
        (self.state = "clean"
```

2) Instansiate the class and take user input.

```
a = str(input("Room A state :"))
b = str(input("Room B state :"))

room_list = []
room_list.append(room(a))
room_list.append(room(b))
```

3 Perception sequience:

```
for i in room_list:
    if (i.state == "dirty"):
        i.suck().
```

Dirtyeel

code

```
class room:

    def __init__(self, a):
        self.state = a
    def suck(self):
        self.state = "clean"

n = 2
roomlist = []
for i in range(n):
    a = str(input(f"Enter room{i+1} state: "))
    roomlist.append(room(a))
start = int(input("Enter starting room number: "))

print("Before cleaning")
print "Room It State"
for i in range(len(roomList)):
    print(f"{i+1}\t{roomList[i].state}")

count = 0
while(count < len(roomlist)):
    if(roomlist[start].state.lower() ==
                "dirty"):
        roomList[start].suck()
    start = (start + 1) % len(roomlist)
    count += 1
print("\n")
```

```
print("After cleaning")
print("Room\t State")

for i in range(len(roomlist)):
    print(f"{i+1}\t{roomlist[i].state}")
```

Output: (for 2)

Enter room 1 state: dirty
Enter room 2 state: dirty
Enter starting room number: 1

Before cleaning

Room	State
1	dirty
2	dirty

After cleaning

Room	state
1	clean
2	clean.

(for 4)

Enter room 1 state: dirty
Enter room 2 state: dirty
Enter room 3 state: dirty
Enter room 4 state: dirty
Enter starting room number: 1

Date / /
Page

Before cleaning

Room	state
1	dirty
2	dirty
3	dirty
4	dirty

After cleaning

Room	state
1	clean
2	clean
3	clean
4	clean.

```
Enter room 1 state:dirty
Enter room 2 state:clean
Enter starting room number:1
Before cleaning
Room    State
1       dirty
2       clean


After cleaning
Room    State
1       clean
2       clean
```