raccum cleanes depl: consider noom A & BA (and A) policio yep 2: start the vaccum cleaner implementation Jep3: check if the direct is present in room A, recon the direction, else turn off vaccum cleaners glep 4: ask the user whether to clear the moon a: on stay in the moon was red of a last rel 3: 091 move to next room A (1 40 A) noil sol step 5: if user select 1, then clean the moorn if usen select a, then stay in the room if user select 3, then move to next room Step 6: repeat from step 3 Cost calculation: 0(bd) b=4 0(42)= 0(16) Output Enter state of A (0 for clean, 1 for dirty): 1 Enter state of B (0 for clean, 1 for dirity): 1 Enter location (A on B): B cleaned B. Moving raccum left Cleaned A. Cost: 2 (A': 0, B': 0)

Enter state of A (0 for clear, 1 for dirity):0 Enter state of B (0 for clear, 1 for dirity):0 5 Enter location (A or B): A Turning vaccum off (A:0, B:0) = mason plan Enter state of A (0 for clean, 1 for direty): 0

Enter state of B (0 for clean, 1 for direty): 1

Enter location (A on B): A I used select 1 then clean · A is clean Moving vaccum Might cleaned B E cost:1 f'A':0, 'B':0)

```
Enter state of A (0 for clean, 1 for dirty): 1
Enter state of B (0 for clean, 1 for dirty): 1
Enter location (A or B): b
Cleaned B.
Moving vacuum left
Cleaned A.
Cost: 2
{'A': 0, 'B': 0}
Enter state of A (0 for clean, 1 for dirty): 0
Enter state of B (0 for clean, 1 for dirty): 0
Enter location (A or B): A
Turning vacuum off
Cost: 0
{'A': 0, 'B': 0}
Enter state of A (0 for clean, 1 for dirty): 0
Enter state of B (0 for clean, 1 for dirty): 1
Enter location (A or B): A
A is clean
Moving vacuum right
                                THRISHA D
Cleaned B.
                                1BM24CS426
Cost: 1
{'A': 0, 'B': 0}
Enter state of A (0 for clean, 1 for dirty): 1
Enter state of B (0 for clean, 1 for dirty): 0
Enter location (A or B): B
B is clean
Moving vacuum left
Cleaned A.
Cost: 1
{'A': 0, 'B': 0}
```