VACCUM CLEANER FOR 2 ROOMS

```
def vacuum_world():
    print("1BM23CS333")
    state = {
        'A': int(input("Enter state of A (0 for clean, 1 for dirty): ")),
        'B': int(input("Enter state of B (0 for clean, 1 for dirty): "))
    }
    location = input("Enter location (A or B): ").strip().upper()
    cost = 0
    if location == 'A':
        if state['A'] == 1:
            print("Cleaned A.")
            state['A'] = 0
            cost += 1
        else:
            print("A is clean")
        if state['B'] == 1:
            print("Moving vacuum right")
            cost += 1
            print("Cleaned B.")
            state['B'] = 0
        else:
            print("Moving vacuum right")
    elif location == 'B':
        if state['B'] == 1:
            print("Cleaned B.")
            state['B'] = 0
            cost += 1
        else:
            print("B is clean")
        if state['A'] == 1:
```

```
            print("Moving vacuum left")
            cost += 1
            print("Cleaned A.")
            state['A'] = 0
        else:
            print("Moving vacuum left")
    print(f"Cost: {cost}")
    print(state)

vacuum_world()
```

OUTPUT

```
1BM23CS333
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): a
Cleaned A.
Moving vacuum right
Cleaned B.
Cost: 2
{'A': 0, 'B': 0}
```