TASK - 1

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CODE :

```python
import random as rt



def simpleReflexAgent(vaccum_location,score=-1):
 # check if vaccum default position in room A
 if vaccum_location == 1:
   print("Vaccum Position is defined at room A \n checking room A...")
   if rooms['A']==0:
     print("start cleaning... /n Room A has been cleaned")
     score += 1
     rooms['A'] = 1
   else:
     print("Room A has already cleaned")
     score -= 1

   print("Vaccum moved to room B \n checking room B...")
   if rooms['B']==0:
     print("start cleaning... /n Room B has been cleaned")
     score += 1
     rooms['B'] = 1

   else:
     print("Room B has already cleaned")
     score -= 1



 else:
   print("Vaccum Position is defined at room B \n checking room B...")
   if rooms['B']==0:
     print("start cleaning... /n Room B has been cleaned")
```

```python
            score += 1
            rooms['B'] = 1
        else:
            print("Room B has already cleaned")
            score -= 1


        print("Vaccum moved to room A \n checking room A...")
        if rooms['A']==0:
            print("start cleaning... /n Room A has been cleaned")
            score += 1
            rooms['A'] = 1
        else:
            print("Room A has already cleaned")
            score -= 1


        print(f"Both rooms are cleaned now = {rooms}")

    return score




#   0 means room is dirty , 1 means room is clean
# generating random value for room_a
room_a = rt.randint(0,1)
# generating random value for room_a
room_b = rt.randint(0,1)

# defining default vaccum position in a room randomly in the begining,
# 1 means room A and 2 means room B
vaccum_location = rt.randint(1,2)

rooms = {
    'A' : room_a,
    'B' : room_b
}


total_score = simpleReflexAgent(vaccum_location)
print(f"Totalscore = {total_score}")
```

OUTPUT :

```
Vaccum Position is defined at room A
 checking room A...
start cleaning... /n Room A has been cleaned
Vaccum moved to room B
 checking room B...
Room B has already cleaned
Totalscore = -1
```