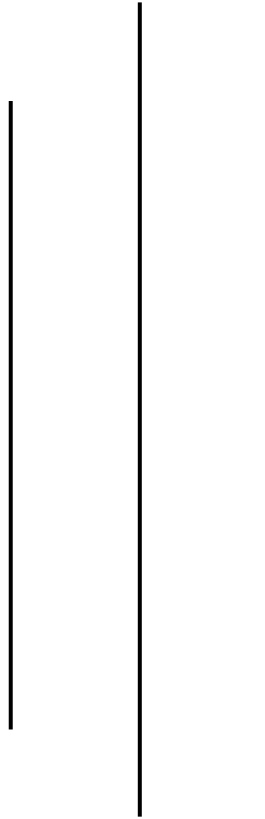**ASSIGNMENT-II**

Programming Assignment: Simulate your Intelligence!

Submitted To

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Contents

1. Code

In this code I am assuming that [🖊] as a **vacuum** cleaner and [____] is clean room and [_..._] is dirt in room.

```
2.   # This is assignment 2 of AI ML Course
3.   import time
4.
5.   def main():
6.       DIRT = [True, True]
7.       VACUUM = [True, False]
8.       my_ai_agent(DIRT, VACUUM)
9.
10.  def my_ai_agent(D, V):
11.      while D[0]==True or D[1]==True:
12.          if V[0]==True:
13.              print("[ VACUUM CLEANER IS IN ROOM A ]")
14.              time.sleep(3)
15.              if D[0] and D[1]:
16.                  print("ROOM [A] : [ 🖊_____.__.__..____.._..___..___.._____..._.____.____._]")
17.                  print("ROOM [B] : [__.._.___.__.__..____.._..___..._____..._.____.____._]")
18.              elif D[0]==True and D[1]==False:
19.                  print("ROOM [A] : [ 🖊_____.__.__..____.._..___..._____..._.____.____._]")
20.                  print("ROOM [B] : [_____]")
21.              elif D[0]==False and D[1]==True:
22.                  print("ROOM [A] : [ 🖊_____]")
23.                  print("ROOM [B] : [__.._.___.__.__..____.._..___..._____..._.____.____._]")
24.
25.              if D[0]==True:
26.                  print("[DIRT FOUND IN ROOM A ]")
27.                  time.sleep(3)
28.                  print("[DIRT CLEANING.......]")
29.                  time.sleep(2)
30.                  print("[ROOM A CLEAR SUCCESSFULLY !]")
31.                  time.sleep(3)
32.                  D[0] = False
33.                  if D[1]==True:
34.                      print("ROOM [A] : [_____🖊]")
35.                      print("ROOM [B] : [__.._.___.__.__..____.._..___..._____..._.____.____._]")
36.                  else:
37.                      print("ROOM [A] : [_____🖊]")
38.                      print("ROOM [B] : [_____]")
39.                  print("[MOVING TO ROOM B]")
```

```python
40.              time.sleep(2)
41.              V[0] = False
42.              V[1] = True
43.          else:
44.              print("[NO DIRT FOUND IN ROOM A]")
45.              time.sleep(3)
46.              print("[MOVING TO ROOM B]")
47.              time.sleep(3)
48.              V[0] = False
49.              V[1] = True
50.
51.      elif V[1]==True:
52.          print("[ VACUUM CLEANER IS IN ROOM B ]")
53.          time.sleep(1)
54.          if D[0]==True and D[1]==True:
55.              print("ROOM [A] : [_____]")
56.              print("ROOM [B] : [ ✎ ..._.___.__.__.__..____.._..___..____..._____...___.____._____._]")
57.          elif D[0]==True and D[1]==False:
58.              print("ROOM [A] : [_____]")
59.              print("ROOM [B] : [ ✎ _____]")
60.          elif D[0]==False and D[1]==True:
61.              print("ROOM [A] : [_____]")
62.              print("ROOM [B] : [ ✎ ..._.___.__.__.__..____.._..___..___..._____...___.____._____._]")
63.
64.          if D[1]==True:
65.              print("[DIRT FOUND IN ROOM B ]")
66.              time.sleep(3)
67.              print("[DIRT CLEANING.......]")
68.              time.sleep(3)
69.              print("[ROOM B CLEAR SUCCESSFULLY !]")
70.              time.sleep(2)
71.              D[1] = False
72.              print("ROOM [A] : [_____]")
73.              print("ROOM [B] : [_____ ✎ ]")
74.              print("[MOVING TO ROOM A]")
75.
76.              time.sleep(2)
77.              V[1] = False
78.              V[0] = True
79.          else:
80.              print("[NO DIRT FOUND IN ROOM B]")
81.              time.sleep(3)
82.              print("[MOVING TO ROOM A]")
83.
84.              time.sleep(2)
```

```
85.              V[1] = False
86.              V[0] = True
87.
88.     print("[ALL ROOMS ARE CLEANED SUCCESSFULLY !]")
89.     print("ROOM [A] : [ ✎_____]")
90.     print("ROOM [B] : [_____]")
91.
92.  main()
```

2. Code Output

Run Code: <u>Click here to run on browser</u>

```
[ VACUUM CLEANER IS IN ROOM A ]
ROOM [A] : [ ✎_____·__·__·'_____·'____·''____·''_____··'___·'_____·'_____·'_]
ROOM [B] : [__·._·___·__·__·'_____·'____·''____·''_____··'___·'_____·'_____·'_]
[DIRT FOUND IN ROOM A ]
[DIRT CLEANING.......]
[ROOM A CLEAR SUCCESSFULLY !]
ROOM [A] : [_____✎]
ROOM [B] : [__·._·___·__·__·'_____·'____·''____·''_____··'___·'_____·'_____·'_]
[MOVING TO ROOM B]
[ VACUUM CLEANER IS IN ROOM B ]
ROOM [A] : [_____]
ROOM [B] : [ ✎·._·___·__·__·'_____·'____·''____·''_____··'___·'_____·'_____·'_]
[DIRT FOUND IN ROOM B ]
[DIRT CLEANING.......]
[ROOM B CLEAR SUCCESSFULLY !]
ROOM [A] : [_____]
ROOM [B] : [_____✎]
[MOVING TO ROOM A]
[ALL ROOMS ARE CLEANED SUCCESSFULLY !]
ROOM [A] : [ ✎_____]
ROOM [B] : [_____]
PS F:\DP AI ML\Python-for-ML-AI>
```