EXPERIMENT 6:

def vacuum\_cleaner(location, status):

actions = []

if location == "A":

if status["A"] == "Dirty":

actions.append("Suck")

status["A"] = "Clean"

actions.append("Move Right")

location = "B"

if status["B"] == "Dirty":

actions.append("Suck")

status["B"] = "Clean"

elif location == "B":

if status["B"] == "Dirty":

actions.append("Suck")

status["B"] = "Clean"

actions.append("Move Left")

location = "A"

if status["A"] == "Dirty":

actions.append("Suck")

status["A"] = "Clean"

return actions, status

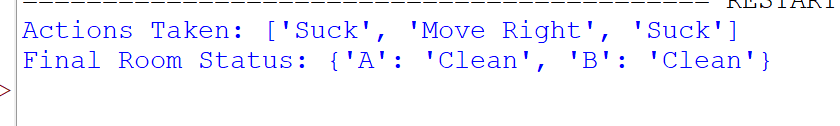
initial\_location = "A"

room\_status = {"A": "Dirty", "B": "Dirty"}

actions\_taken, final\_status = vacuum\_cleaner(initial\_location, room\_status)

print("Actions Taken:", actions\_taken)

print("Final Room Status:", final\_status)

**OUTPUT:**