

EX:9

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IMPLEMENTATION OF BLOCKS WORLD

PROGRAM:

```
class BlocksWorld:
    def __init__(self):
        self.state = {
            "A": "B",    # A is on B
            "B": "table", # B is on table
            "C": "table" # C is on table
        }
        self.goal = {
            "A": "B",
            "B": "C",
            "C": "table"
        }

    def is_goal_state(self):
        return self.state == self.goal
```

```

def move(self, block, destination):
    if block in self.state and self.state[block] != destination:
        print(f"Moving {block} from {self.state[block]} to
{destination}")
        self.state[block] = destination

def plan_moves(self):
    print("\nInitial State:", self.state)
while not self.is_goal_state():
    for block, target in self.goal.items():
        if self.state[block] != target:
self.move(block, target)
    print("\nFinal Goal State Reached:", self.state)

```

```

# Run the Blocks World Solver bw
= BlocksWorld() bw.plan_moves()

```

OUTPUT:

```

===== RESTART: C:/Users/yadhu/puc/poai-7.py =====
Initial State: {'A': 'B', 'B': 'table', 'C': 'table'}
Moving B from table to C

Final Goal State Reached: {'A': 'B', 'B': 'C', 'C': 'table'}
>>> |

```