```
class BlocksWorld:
    def __init__(self, num_blocks):
        self.state = [[i] for i in range(num_blocks)]

    def display(self):
        for stack in self.state:
            print("Stack:", stack)
    def find_stack(self, block):
        return next((s for s in self.state if block in s),
None)
    def move(self, block, dest):
        src = self.find_stack(block)
        dst = self.find_stack(dest)
        if src and dst:
            src.remove(block)
            dst.append(block)
            self.display()
        else:
            print("Invalid move.")
    def set_goal(self, goal):
        self.state = goal
        print("Goal state:")
        self.display()
def main():
    bw = BlocksWorld(3)
    print("Initial state:")
    bw.display()
    bw.set_goal([[0, 1], [2]])
    print("\nMoves:")
    bw.move(0, 2)
    bw.move(1, 2)
    bw.move(2, 0)
if __name__ == "__main__":
    main()
```

```
Initial state:
Stack: [0]
Stack: [1]
Stack: [2]
Goal state:
Stack: [0, 1]
Stack: [2]

Moves:
Stack: [1]
Stack: [2, 0]
Stack: []
Stack: [2, 0, 1]
Stack: []
Stack: [0, 1, 2]

[Program finished]
```