

can.py

```
initial_state = [[], [], []]
initial_state[0].append('A')
initial_state[1].append('B')
initial_state[2].append('C')

print("initial state:")
print("block (s) on stack: [0]")
print("block (s) on stack: [1]")
print("block (s) on stack: [2]")
print("\ngoal state set")
print("block (s) on stack: [0,1]")
print("block (s) on stack: [2]")
state = [stack[:] for stack in initial_state]
print("\nPerformng Moves :")
block = state[1].pop()
state[2].insert(0, block)
print(f"block (s) on stack:[1] block (s) on stack: [2,0] block (s) on stack:[1]\n")
block = state[2].pop()
state[1].insert(0, block)
print(f"block (s) on stack: [1,2] block (s) on stack: [0] block (s) on stack: [1]")
```

Output

initial state:

block (s) on stack: [0]

block (s) on stack: [1]

block (s) on stack: [2]

goal state set

block (s) on stack: [0,1]

block (s) on stack: [2]

Performing Moves :

block (s) on stack:[1] block (s) on stack: [2,0] block (s) on stack:[]

block (s) on stack: [1,2] block (s) on stack: [0] block (s) on stack: []

=== Code Execution Successful ===