Task (G_0^0) - Serve me **three snacks** and **a coffee**

3D Scene Graph

Situational Shifting

Goal Relaxation

Relaxation Graph

G_0^0 *Give me three snacks and **a coffee*** ✗

G_1^0 *Give me three snacks and **a coke*** ✗

G_2^0 *Give me three snacks and **juice***

G_3^0 *Give me three snacks and **water***

G_1^1 *Give me **three snacks*** ✗

G_2^1 *Give me **three fruits*** ✗

G_3^1 *Give me three **eatable items***

Not explored

G_2^2 *Give me **two fruits*** ✗

G_3^2 *Give me **an apple and a banana*** ✓

Not explored

Not explored

Grounding Failure ✗
Grounding Success ✓

Planning

Goal Relaxation

Goal G_0^0 / Domain / Plan π_1 ✗

Goal G_1^0 / Domain / Plan π_2 ✗

Goal Relaxation

Goal G_1^1 / Domain / Plan π_3 ✗

Goal G_2^1 / Domain / Plan π_4 ✗

Goal Relaxation

Goal G_2^2 / Domain / Plan π_5 ✗

Goal G_3^2 / Domain / Plan π_6 ✓

Situational Shifting

Final Plan

move_to(robot_1, corridor_6, kitchen_2)

grab(robot_1, banana_32, kitchen_2)

move_to(robot_1, kitchen_2, dining_room_8)

put_on(robot_1, banana_32, chair_15, dining_room_8)

move_to(robot_1, dining_room_8, kitchen_2)

grab(robot_1, apple_34, kitchen_2)

move_to(robot_1, kitchen_2, dining_room_8)

put_on(robot_1, apple_34, chair_15, dining_room_8)