```
Activities     Terminal                                    Jul 20 15:54

                                              mobilearm@mobilearm: ~

Obstacle: 75.05 cm |   Traveled: 5.58 cm
Obstacle: 104.21 cm |   Traveled: 11.41 cm
Obstacle: 107.59 cm |   Traveled: 17.19 cm
Obstacle: 96.76 cm |   Traveled: 22.96 cm
Obstacle: 175.13 cm |   Traveled: 28.9 cm
Obstacle: 154.61 cm |   Traveled: 34.83 cm
Obstacle: 128.26 cm |   Traveled: 40.76 cm
Obstacle: 137.71 cm |   Traveled: 46.58 cm
Obstacle: 124.98 cm |   Traveled: 52.48 cm
Reached shelf at 50 cm
[ WARN:0@20.083] global ./modules/videoio/src/cap_gstreamer.cpp (1405) open OpenCV | GStreamer warning: Cannot query video position: status=0, value=-1, duration=-1
Looking for marker ID: 3 (Press 'q' to quit)
Detected: X=-0.02m, Y=-0.04m, Z=0.18m
Sent to Arduino: [0, 30, 0, 70, 60, 45]
Sent to Arduino: [0, 112, 45, 70, 90, 45]
Waiting 5s at object location...
Sent to Arduino: [0, 112, 45, 70, 90, 1]
Sent to Arduino: [0, 30, 0, 70, 60, 1]
Pick-and-place done
mobilearm@mobilearm:~ $ python3 final_test1.py
^CTraceback (most recent call last):
  File "/home/mobilearm/final_test1.py", line 11, in <module>
    time.sleep(2)
KeyboardInterrupt
mobilearm@mobilearm:~ $ python3 final_test1.py
Sent to Arduino: [0, 30, 0, 70, 60, 1]
Input mode (voice/text): text
Enter your command (e.g., 'take red box from shelf A'): shelf a
You entered: shelf a

Target Shelf: 50 cm
Obstacle: 217.22 cm |   Traveled: 5.59 cm
Obstacle: 190.64 cm |   Traveled: 11.75 cm
Obstacle: 184.45 cm |   Traveled: 17.66 cm
Obstacle: 126.62 cm |   Traveled: 23.72 cm
Obstacle: 76.18 cm |   Traveled: 29.69 cm
Obstacle: 157.06 cm |   Traveled: 35.42 cm
Obstacle: 154.01 cm |   Traveled: 41.4 cm
Obstacle: 141.65 cm |   Traveled: 47.38 cm
Obstacle: 128.63 cm |   Traveled: 53.23 cm
Reached shelf at 50 cm
[ WARN:0@28.469] global ./modules/videoio/src/cap_gstreamer.cpp (1405) open OpenCV | GStreamer warning: Cannot query video position: status=0, value=-1, duration=-1
Looking for marker ID: 3 (Press 'q' to quit)
Detected: X=-0.01m, Y=-0.01m, Z=0.12m
Sent to Arduino: [0, 30, 0, 70, 60, 45]
Sent to Arduino: [0, 82, 3, 70, 90, 45]
Waiting 5s at object location...
Sent to Arduino: [0, 82, 3, 70, 90, 1]
Sent to Arduino: [0, 30, 0, 70, 60, 1]
Pick-and-place done
mobilearm@mobilearm:~ $ python3 final_test1.py
Sent to Arduino: [0, 30, 0, 70, 60, 1]
Input mode (voice/text): text
Enter your command (e.g., 'take red box from shelf A'):
```