

```
Activities Terminal Jul 20 15:55 •
mobilearm@mobilearm: ~
[ 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: 157.66 cm | ↗ Traveled: 35.42 cm
  Obstacle: 154.61 cm | ↗ Traveled: 41.4 cm
  Obstacle: 122.65 cm | ↗ Traveled: 47.38 cm
  Obstacle: 122.63 cm | ↗ Traveled: 53.23 cm
Reached shelf at 50 cm
[ WARN@0028.469] 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, 82, 0, 70, 90, 45]
  Sent to Arduino: [0, 82, 3, 70, 90, 45]
  Waiting ss 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'): shelf a
✓ You entered: shelf a

  Target Shelf: 50 cm
  Obstacle: 206.64 cm | ↗ Traveled: 5.57 cm
  Obstacle: 207.04 cm | ↗ Traveled: 11.7 cm
  Obstacle: 207.5 cm | ↗ Traveled: 17.84 cm
  Obstacle: 207.08 cm | ↗ Traveled: 23.97 cm
  Obstacle: 206.32 cm | ↗ Traveled: 30.11 cm
  Obstacle: 207.51 cm | ↗ Traveled: 36.25 cm
  Obstacle: 206.64 cm | ↗ Traveled: 42.38 cm
  Obstacle: 206.61 cm | ↗ Traveled: 48.52 cm
  Obstacle: 206.33 cm | ↗ Traveled: 54.65 cm
Reached shelf at 50 cm
[ WARN@0027.875] 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)
```