

Owl Demo Run

```
(base) byronmitchell@byrons-mbp pixel-portfolio % dune exec demo/owl/owl_demo.exe
=== Owl Library Demo ===

1. Normal Distribution (mean=0, std=1):
-0.6724
-0.2152
0.5728
-0.8372
-1.8698

2. Normal Distribution (mean=0.05, std=0.2) - like daily stock returns:
0.1582 (15.82%)
0.3823 (38.23%)
0.2094 (20.94%)
0.1926 (19.26%)
0.3131 (31.31%)

3. Creating a simple correlation matrix:
Correlation matrix shape: 3 x 3

4. Basic array statistics:
Data: [10, 20, 30, 40, 50]
Mean: 30.00
Std: 15.81

5. Simulating 10 price movements:
Step 1: $101.28 (return: 1.28%)
Step 2: $103.59 (return: 2.29%)
Step 3: $104.64 (return: 1.01%)
Step 4: $106.09 (return: 1.39%)
Step 5: $105.19 (return: -0.84%)
Step 6: $101.77 (return: -3.25%)
Step 7: $102.57 (return: 0.79%)
Step 8: $102.32 (return: -0.25%)
Step 9: $105.10 (return: 2.71%)
Step 10: $102.64 (return: -2.34%)

Owl demo completed successfully!
```

Commandliner Demo Run

```
(base) byronmitchell@byrons-mbp pixel-portfolio % dune exec demo/cmdliner/cmdliner_demo.exe -- AAPL 100
=== Cmdliner Demo ===

Stock: AAPL
Shares: 100
Market Order (no price limit)

Cmdliner demo completed successfully!
(base) byronmitchell@byrons-mbp pixel-portfolio % dune exec demo/cmdliner/cmdliner_demo.exe -- GOOGL 50 --price 150.00
=== Cmdliner Demo ===

Stock: GOOGL
Shares: 50
Limit Price: $150.00
```