

# Nested Loops: Loop Within a Loop

Outer Loop: for ticker in ["AAPL", "MSFT", "GOOGL"]

Inner Loop: `for day in range(5)`

**Process each ticker for each day**

Total iterations: 3 tickers  $\times$  5 days = 15

## Nested Loop Example: Price Matrix

```
tickers = ["AAPL", "MSFT", "GOOGL"]
days = ["Mon", "Tue", "Wed", "Thu", "Fri"]

for ticker in tickers:                      # Outer loop (3 iterations)
    print(f"\n{ticker} prices:")
    for day in days:                        # Inner loop (5 iterations)
        price = get_price(ticker, day)      # Called 15 times total
        print(f"  {day}: ${price:.2f}")

# Output:
# AAPL prices:
#   Mon: $150.50
#   Tue: $151.25
#   ...
# MSFT prices:
#   Mon: $180.00
#   Tue: $181.50
#   Wed: $182.00
#   Thu: $183.00
#   Fri: $184.00
# GOOGL prices:
#   Mon: $250.00
#   Tue: $251.50
#   Wed: $252.00
#   Thu: $253.00
#   Fri: $254.00
```