

```

86 print("COMPARISON")
87 print("="*60)
88 print(f"Simple Linear Regression  $R^2$  = {r2_score(y_test_s,
    ↪ y_pred_s):.4f}")
89 print(f"Multiple Linear Regression  $R^2$  = {r2_score(y_test_m,
    ↪ y_pred_m):.4f}")

```

Output:

```

1 Dataset Shape: (150, 5)
2     sepal_length  sepal_width  petal_length  petal_width  species
3 0             5.1           3.5           1.4           0.2           0
4 1             4.9           3.0           1.4           0.2           0
5 2             4.7           3.2           1.3           0.2           0
6 3             4.6           3.1           1.5           0.2           0
7 4             5.0           3.6           1.4           0.2           0
8
9 =====
10 1. SIMPLE LINEAR REGRESSION (petal_length → petal_width)
11 =====
12 Slope: 0.4132
13 Intercept: -0.3567
14  $R^2$  Score: 0.9283
15 RMSE: 0.2136
16
17 =====
18 2. MULTIPLE LINEAR REGRESSION (3 features → petal_width)
19 =====
20 Coefficients : [-0.2343  0.2359  0.5343]
21 Intercept: -0.1693
22  $R^2$  Score: 0.9271
23
24 =====
25 COMPARISON
26 =====
27 Simple Linear Regression  $R^2$  = 0.9283
28 Multiple Linear Regression  $R^2$  = 0.9271

```