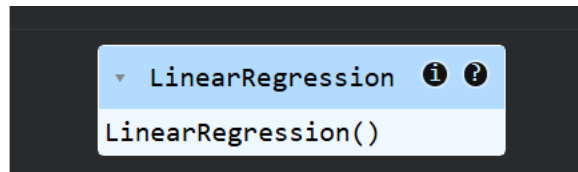


## OUTPUT



```
... === Baseline Linear Regression ===  
Coefficients: [ 4.48674910e-01  9.72425752e-03 -1.23323343e-01  7.83144907e-01  
-2.02962058e-06 -3.52631849e-03 -4.19792487e-01 -4.33708065e-01]  
Intercept: -37.02327770606391
```

```
Train MSE: 0.5179331255246699  
Test  MSE: 0.5558915986952422
```



```
=== Hyperparameter Tuning Results ===  
Best Ridge alpha: 1.0  
Best Ridge CV MSE: 0.5192628644116295  
Best Lasso alpha: 0.001  
Best Lasso CV MSE: 0.519274809485791
```

```
=== Ridge (L2) with best alpha ===  
Coefficients: [ 4.48510924e-01  9.72596535e-03 -1.23014157e-01  7.81416761e-01  
-2.02581346e-06 -3.52585878e-03 -4.19786908e-01 -4.33680793e-01]  
Train MSE: 0.5179332149226819  
Test  MSE: 0.5558034669932196
```

```
=== Lasso (L1) with best alpha ===  
Coefficients: [ 4.44698243e-01  9.78271615e-03 -1.15737191e-01  7.41172257e-01  
-1.85738492e-06 -3.50964130e-03 -4.18521643e-01 -4.31828076e-01]  
Train MSE: 0.5179897619159226  
Test  MSE: 0.5538940157172418
```