

GLM ASSIGNMENT

By Meer Ghanee(232PGFO13)

- RMSE Values by different Combinations of Alpha and Lambda Value Using Generalised Linear Model (GLM)

Walmart Data		
Alpha	Lambda	RMSE
0	0.5	549501.112
0	0.7	549976.556
0	1	550585.704
0.5	0.5	548864.576
0.5	0.9	549374.713
0.5	1	549501.132
1	0.6	548988.969
1	0.9	549374.713
1	1	549501.132

- Interpretation Of GLM Result

- **Alpha 0, Lambda 0.5:**

RMSE is 549,501.112, meaning model accuracy is moderate with these regularization parameters.

- **Alpha 0, Lambda 0.7:**

RMSE increases slightly to 549,976.556, indicating a marginal drop in model accuracy.

- **Alpha 0, Lambda 1:**

RMSE rises to 550,585.704, suggesting the model performs less well with maximum lambda.

- **Alpha 0.5, Lambda 0.5:**

RMSE is 548,864.576, showing an improvement in model accuracy compared to alpha 0.

- **Alpha 0.5, Lambda 0.9:**

RMSE of 549,374.713 suggests that the model's performance remains steady with increased lambda.

- **Alpha 0.5, Lambda 1:**

RMSE is 549,501.132, with model performance similar to lambda 0.9, showing stability.

- **Alpha 1, Lambda 0.6:**

RMSE of 548,988.969 suggests a good model fit with these higher regularization parameters.

- **Alpha 1, Lambda 0.9:**

RMSE remains at 549,374.713, indicating consistent performance as lambda approaches 1.

- **Alpha 1, Lambda 1:**

RMSE is 549,501.132, indicating a slight increase but still relatively stable performance.

