Key Insights and Performance of Sales Forecasting model
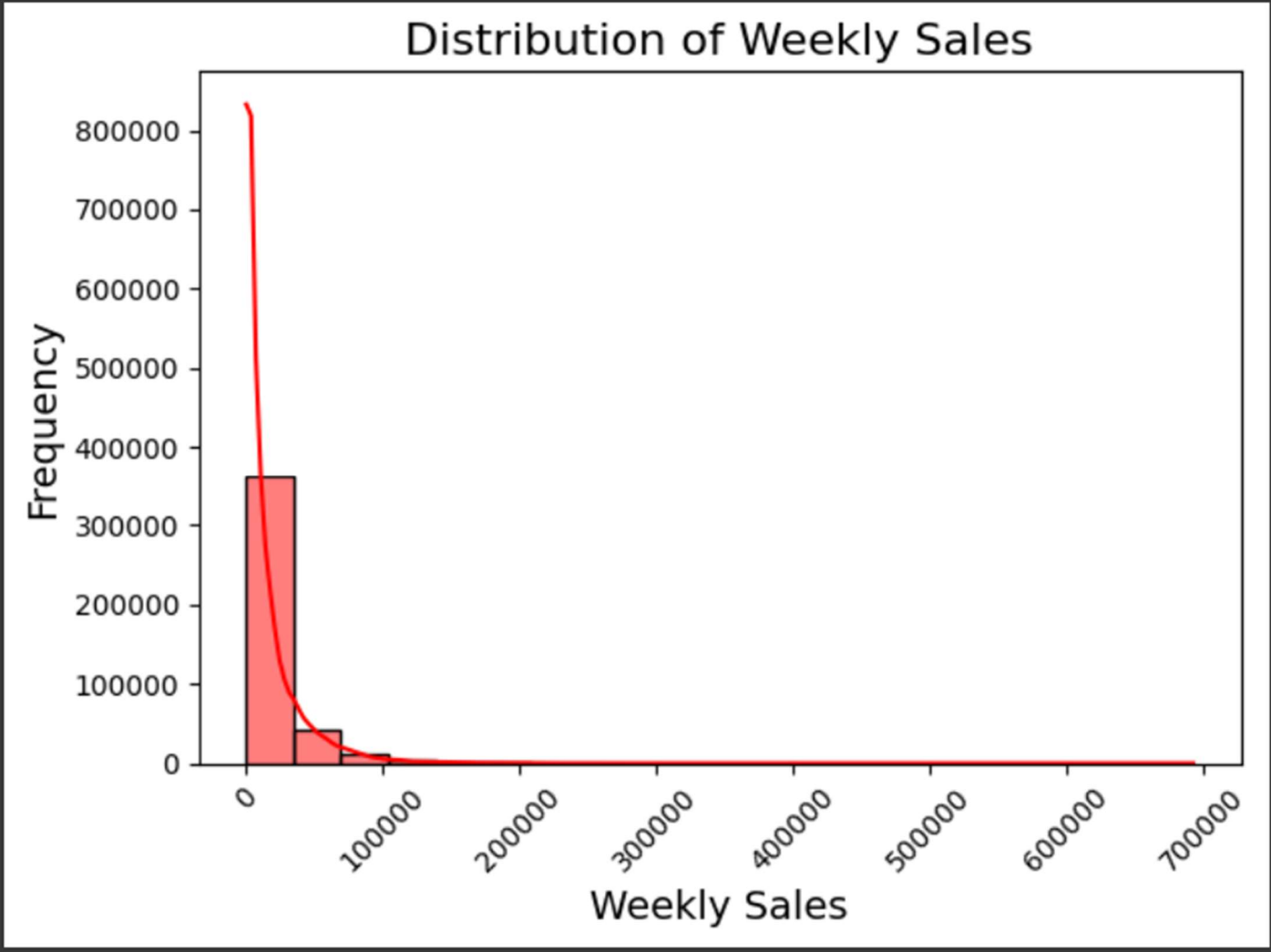
Insights

Distribution of Weekly Sales

Total Weekly Sales by Store
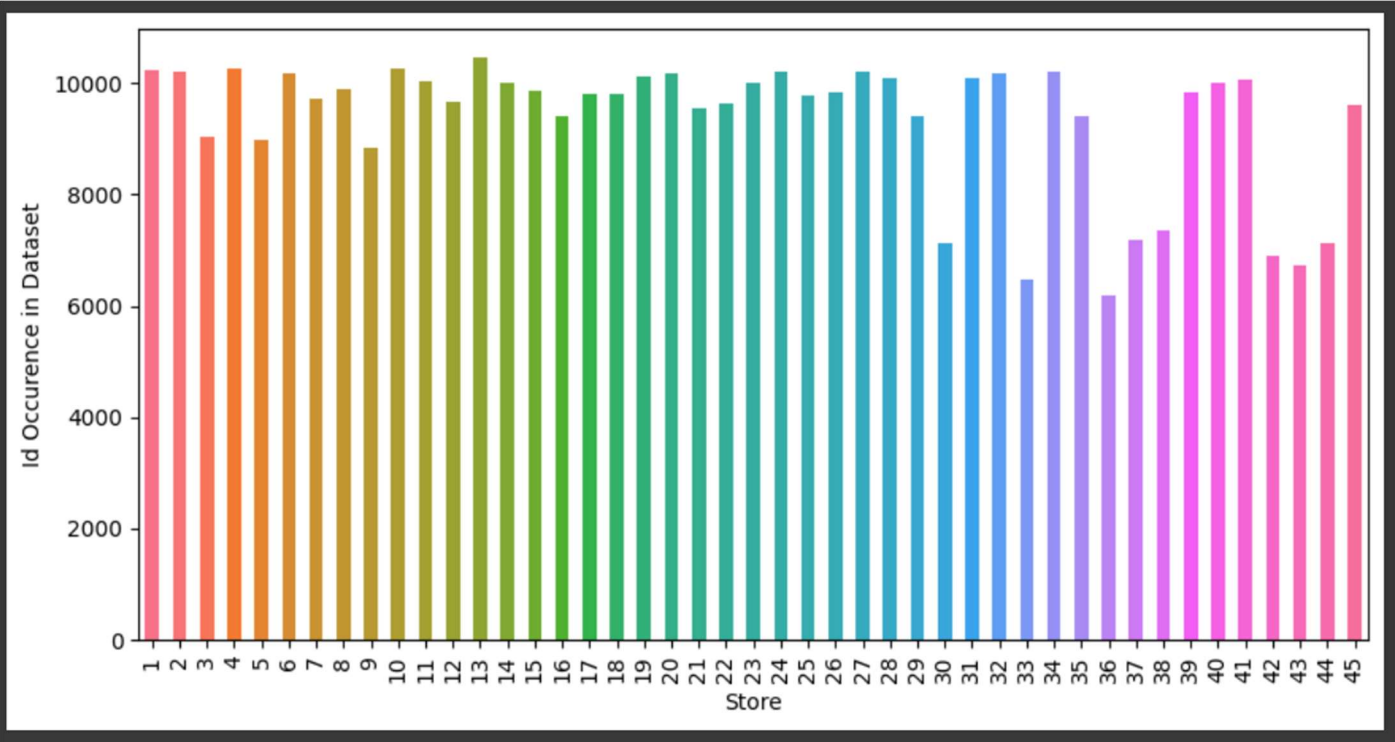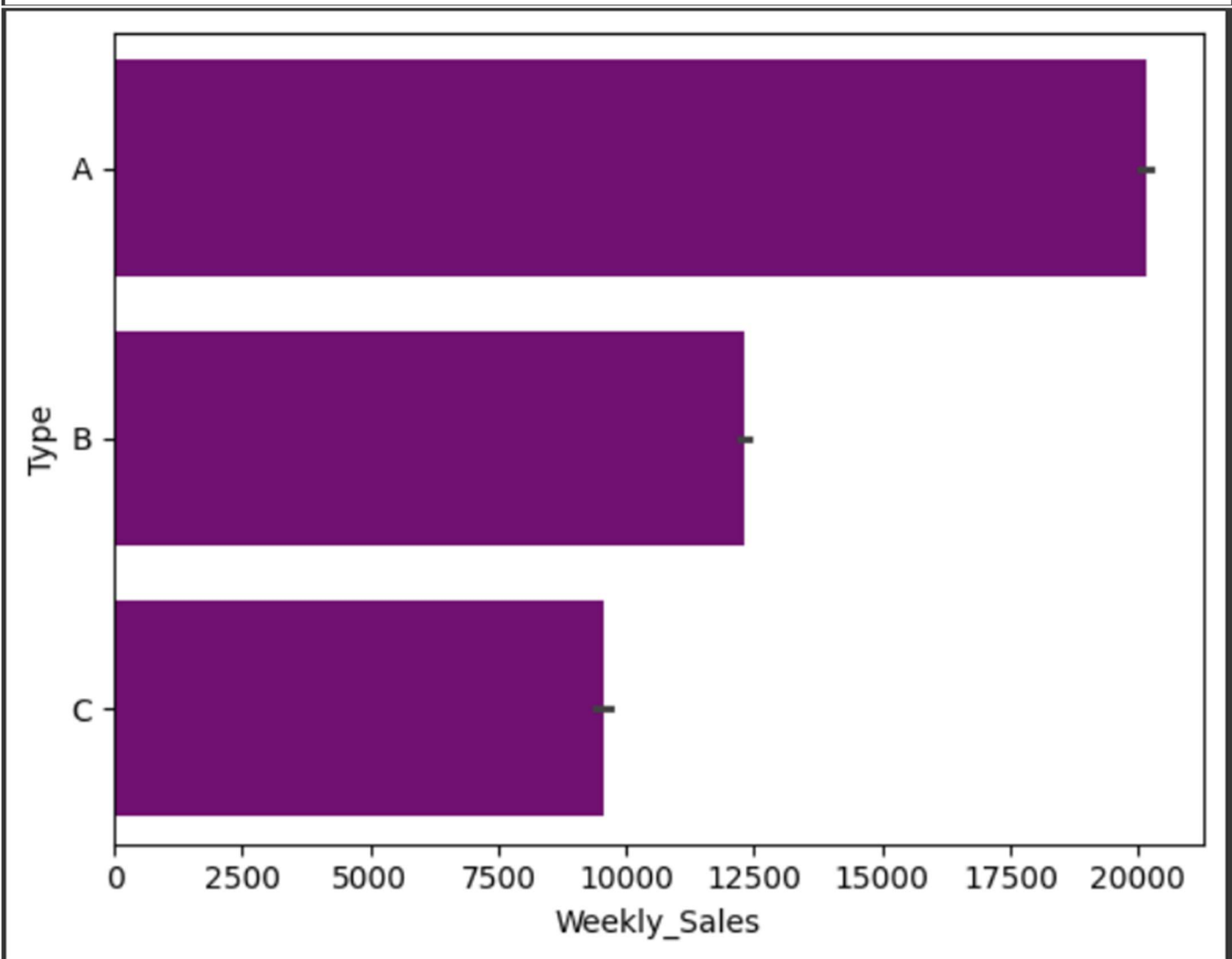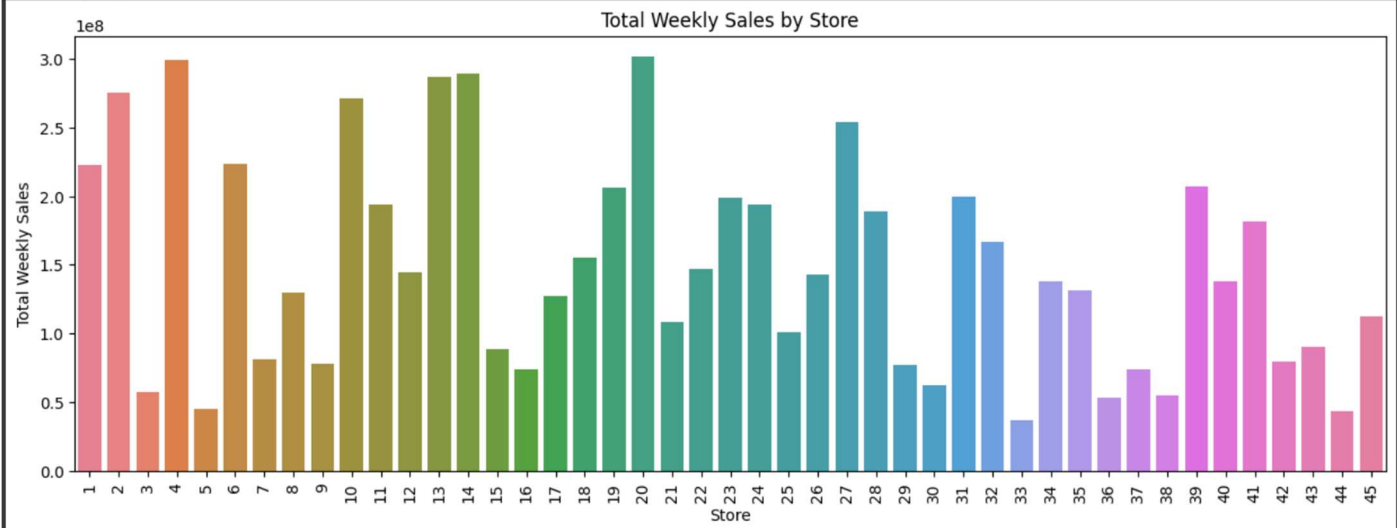
Model Performance

```
R2 train score for Random Forest model: 0.9974813671176948
R2 test score for Random Forest model: 0.9823755082076555
Training RMSE for Random Forest model: 1027.2689472310738
Test RMSE for Random Forest model: 2731.763733512548
*****************************************
R2 train score for Gradient Boost Regression model: 0.7603207234376111
R2 test score for Gradient Boost Regression model: 0.7612302465590908
Training RMSE for Gradient Boost Regression model: 10021.136281445213
Test RMSE for Gradient Boost Regression model: 10054.8243721401
*****************************************
R2 train score for XGBRegression model: 0.9518328978334213
R2 test score for XGBRegression model: 0.9493850804202327
Training RMSE for XGBRegression model: 4492.385173560081
Test RMSE for XGBRegression model: 4629.393625076529
```