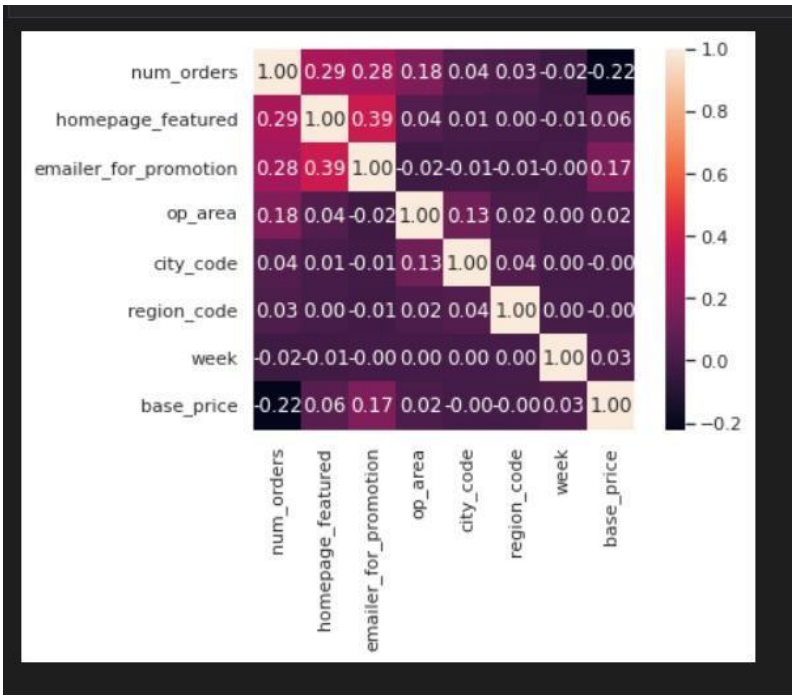
Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID18550
Project Name	Project – AI Powered Food Demand Forecaster
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot

1.	Metrics	**Correlation Matrix**	**Correlation Matrix** 

2.	Tune the Model	RMSLE Values comparison for Decision Tree Regression, XGB Regression, Linear Regression and Lasso Regression.	**Decision Tree Regression**
			`KNN = DecisionTreeRegressor()`
			`KNN.fit(X_train, Y_train)`
			`y_pred = KNN.predict(X_val)`
			`y_pred[y_pred<0] = 0`
			`from sklearn import metrics`
			`print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(Y_val, y_pred))`
			`RMSLE: 89.69506088378594`
			XGB Regression
			`XG = XGBRegressor()`
			`XG.fit(X_train, Y_train)`
			`y_pred = XG.predict(X_val)`
			`y_pred[y_pred<0] = 0`
			`from sklearn import metrics`
			`print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(Y_val, y_pr`
			`[07:02:44] WARNING: /workspace/src/objective/regression_obj.cu:152: reg:l`
			`RMSLE: 101.75835240676072`
			Linear Regression
			`LR = LinearRegression()`
			`LR.fit(X_train, Y_train)`
			`y_pred = LR.predict(X_val)`
			`y_pred[y_pred<0] = 0`
			`from sklearn import metrics`
			`print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(Y_val, y_pr`
			`RMSLE: 155.0295463202577`

			Lasso Regression
			`L = Lasso()`
			`L.fit(X_train, Y_train)`
			`y_pred = L.predict(X_val)`
			`y_pred[y_pred<0] = 0`
			`from sklearn import metrics`
			`print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(Y_v`
			`RMSLE: 153.61529213206654`