Model Used:

- **RandomForestRegressor**:
  - A ML algo that uses combination of decision trees to make predictions for regression tasks.
  - Handles categorical and numerical data efficiently.
  - Robust to outliers and does not require scaling of features.

Performance:

- **Validation Metrics:**
  - RMSE: 0.7601
  - MAE: 0.3645
  - R^2: 0.8074

Variable Importance:

The most influential features were:

1. **courier_partner_id** (37.35%): Indicates that the performance of courier partners significantly affects delivery SLA.
2. **drop_pin_code** (36.63%): Geographic details of the delivery location impact the prediction.
3. **order_shipped_date** (14.69%): Time of shipment affects how fast deliveries are completed.
4. **pickup_pin_code** (8.78%): The origin location influences delivery efficiency.

Other features like **account_mode** and **account_type_id** had minimal impact.