**Data Link :** [Customer\_Support\_Tickets.xlsx](https://docs.google.com/spreadsheets/d/1HUKt8BwHEhT1xZ5HX93UvcLZul1dsnI5/edit?usp=drive_link&ouid=116581504019999500009&rtpof=true&sd=true)

**Data TRansformation and Data cleaning :**

1. Convert column names to lowercase and replace spaces with underscores (e.g., CustomerName to customer\_name)
2. Ensure CreatedDate and ResolvedDate are in date format.
3. Convert SatisfactionScore to a numerical type.
4. Create new columns for created\_year and created\_month based on CreatedDate.
5. Create a new column resolution\_time that calculates the difference between ResolvedDate and CreatedDate.
6. Categorize SatisfactionScore into ranges (e.g., Low, Medium, High).
7. remove duplicate records based on TicketID.
8. Fill missing CustomerName with a placeholder (e.g., "Unknown Customer").
9. Replace missing SupportRep with a default value (e.g., "Unassigned").
10. Use the median value for SatisfactionScore to fill missing scores.
11. Remove leading and trailing whitespace from string fields like CustomerName and IssueDescription.
12. Remove rows where CreatedDate or ResolvedDate are NULL or not valid dates.