Staff Management Tool

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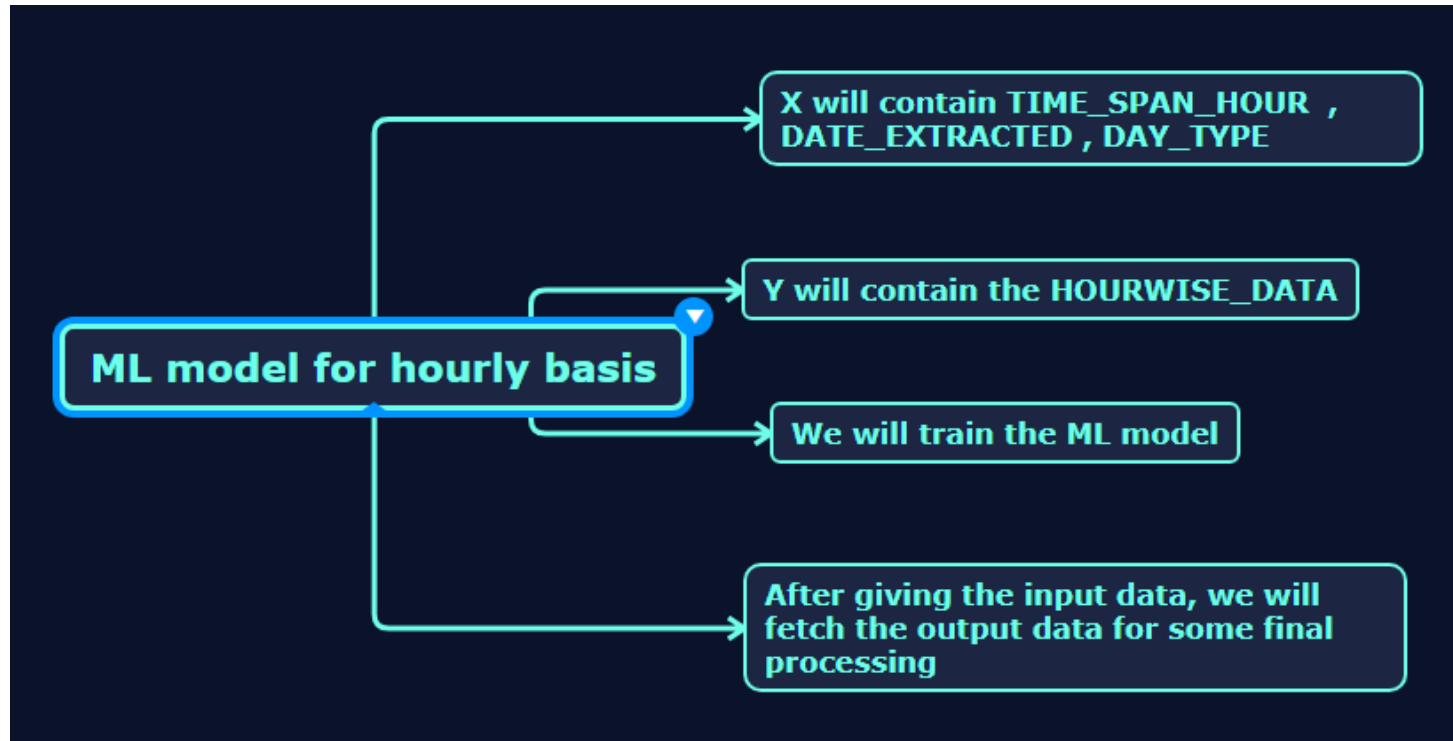- Conclusion

Introduction

Our model aims to predict the most important and critical operational function in the remote IT service desk which is to make sure that enough people are on the phones to respond to calls and chats with a minimum delay. The main goal is to have the precise number of people needed at every hour of the day, every day of the week and each week of the month so as to minimize the delay.
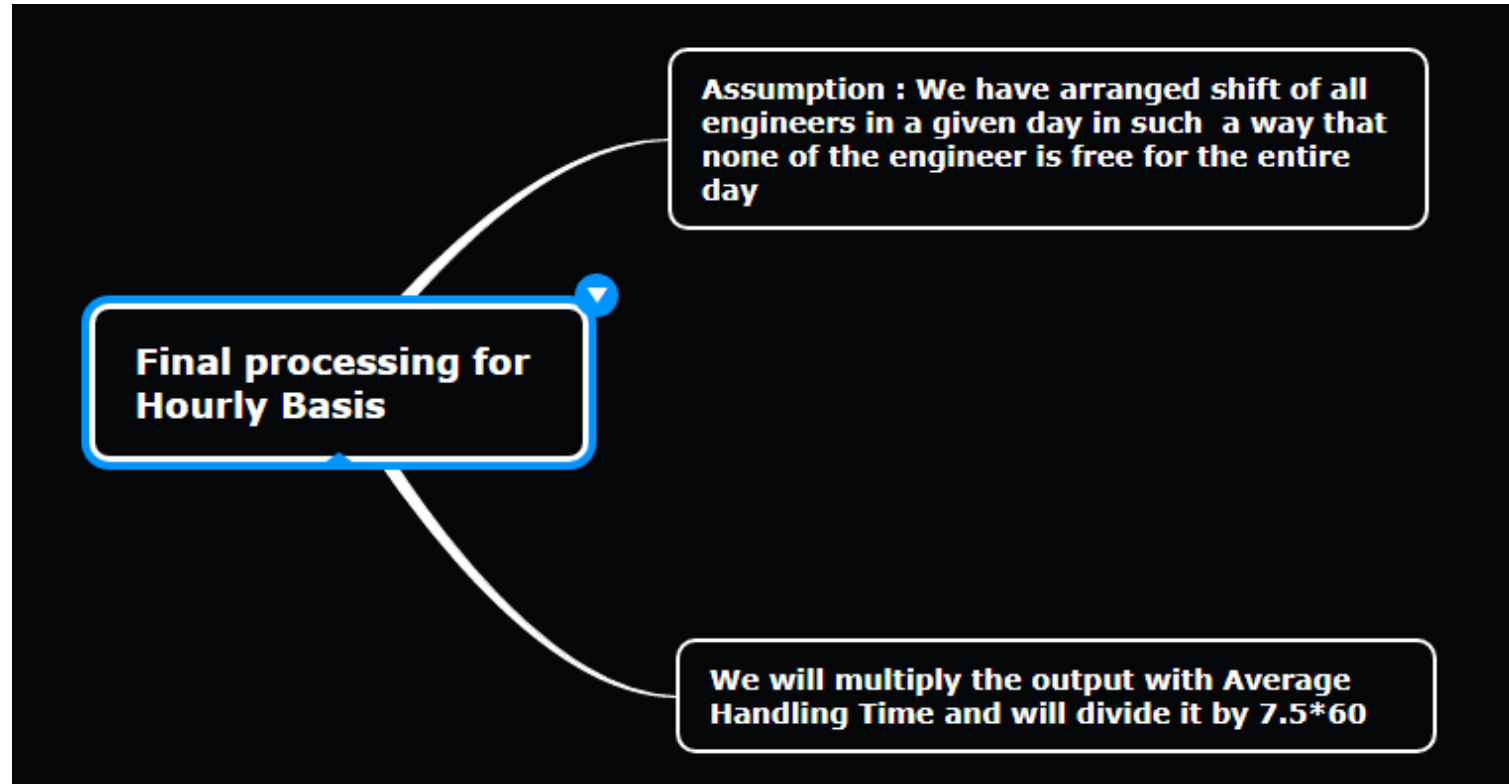
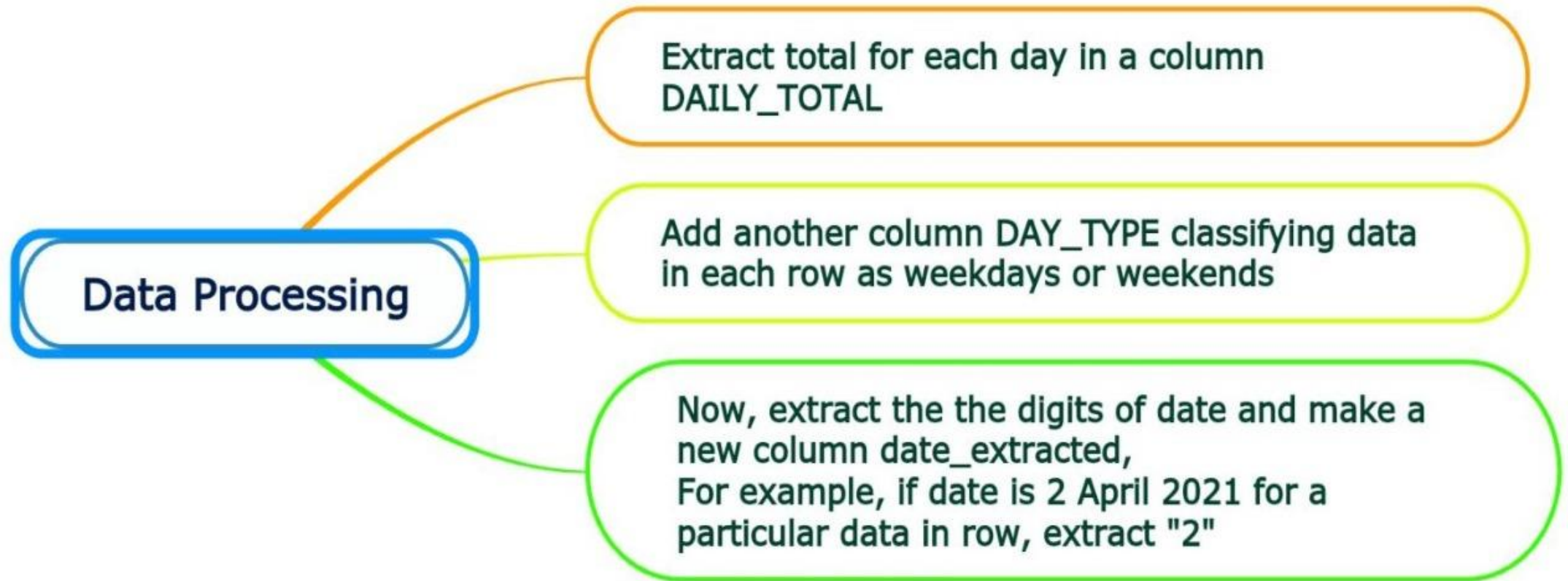# Problem 1: Hourly Basis
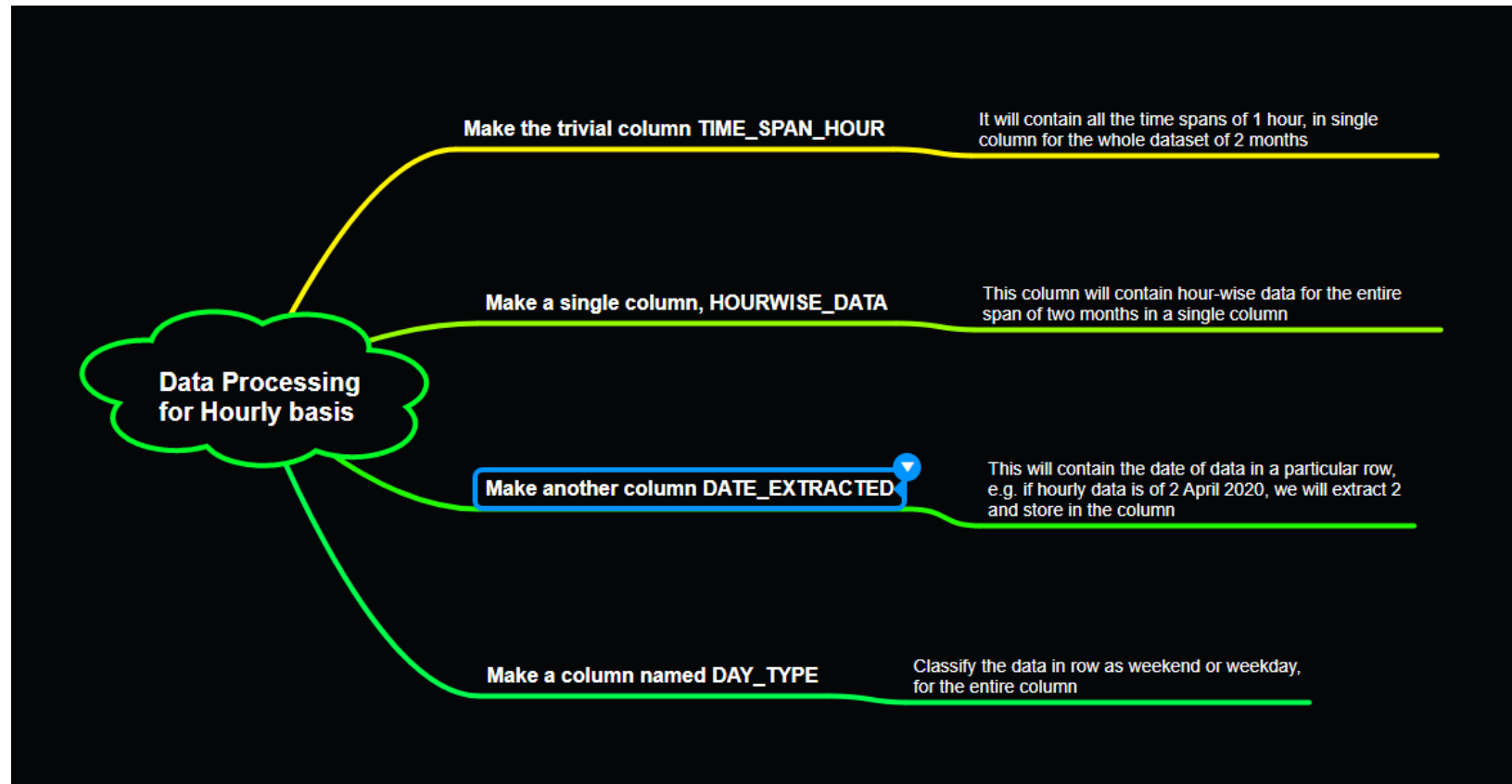
PREPARING DATASET FOR TRAINING

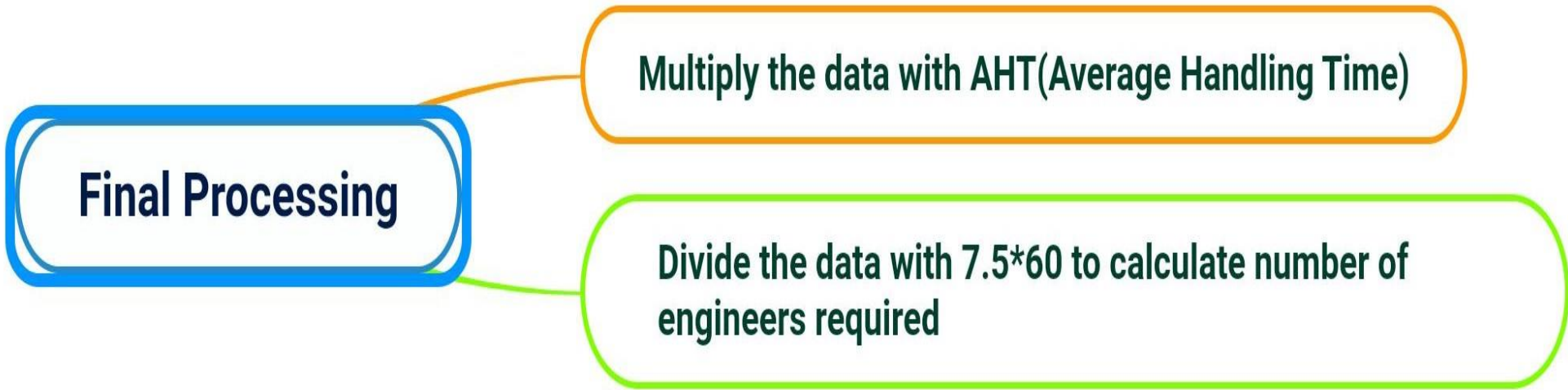**TRAINING THE MODEL**

CALCULATING THE NUMBER OF RESOURCES REQUIRED

Problem 2: Daily Basis

Data Processing

- Extract total for each day in a column DAILY_TOTAL
- Add another column DAY_TYPE classifying data in each row as weekdays or weekends
- Now, extract the the digits of date and make a new column date_extracted,
  For example, if date is 2 April 2021 for a particular data in row, extract "2"

PREPARING DATASET FOR TRAINING

TRAINING THE MODEL

Final Processing

Multiply the data with AHT(Average Handling Time)

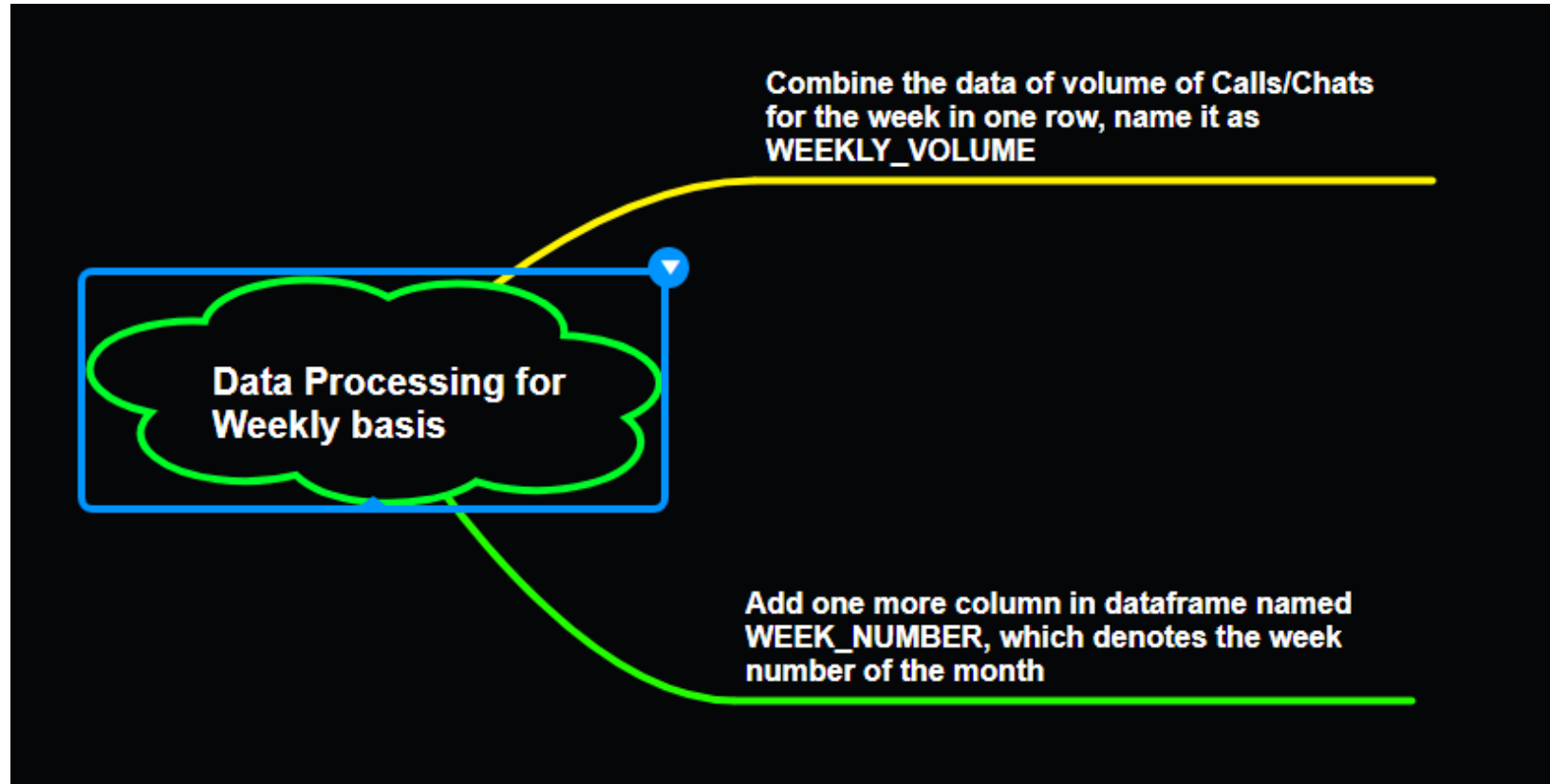Divide the data with 7.5*60 to calculate number of engineers required
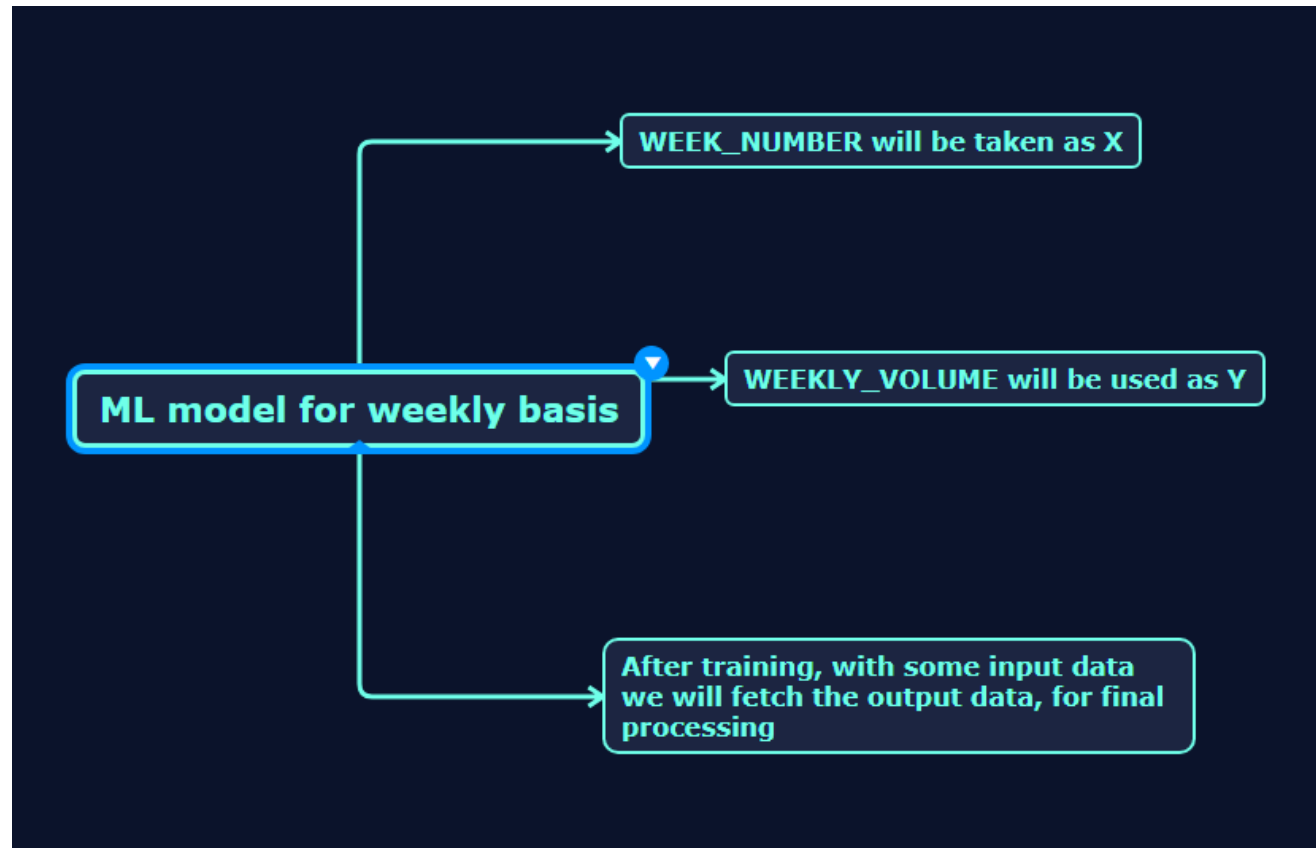
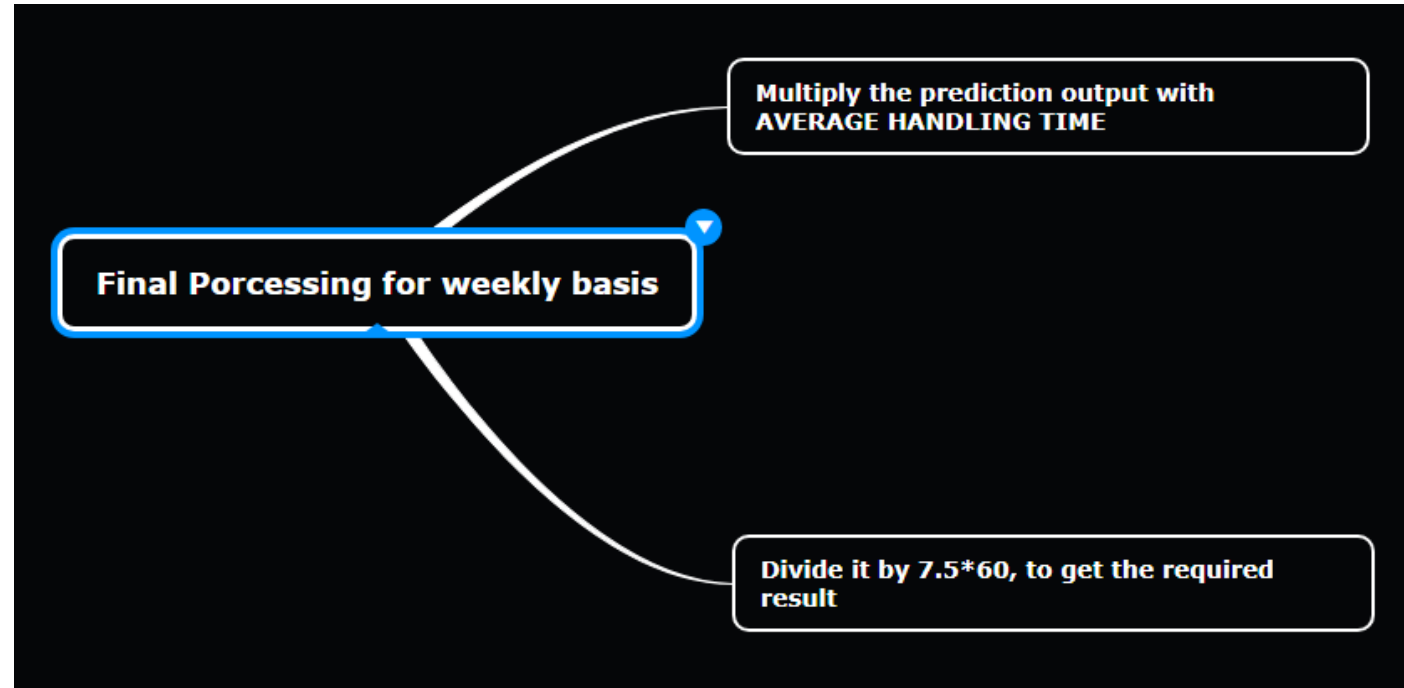**Calculating the number of RESOURCES required**

Problem 3: Weekly Basis

PREPARING DATASET FOR TRAINING

TRAINING THE MODEL

Calculating the number of RESOURCES required

CONCLUSION

The accurate forecast of the resources achieved using this model helps determine the workload to be handled on hourly, daily and weekly basis and creates a proper plan for the resources necessary.

Once the plan is in place, the focus of the daily management process is to execute the plan and adjust for unforeseen changes resulting in consistently accepting speed for answering calls and chats.

The model is retrainable after every month with new set of historical data.