**Important Note:**

* consider checkInTime parameter as walk time
* data is old, so consider today as last checkInTime date

# Walker Basic Info Table

## Description

* + 1. With this table, we will get basic walker performance infos.

## Table Index

* + 1. walkerId

## Table Column

* + 1. totalWalks
       1. Total number of walks done by walker so far
    2. firstWalk
       1. First walk date of walker
    3. lastWalk
       1. Last walk date of walker
    4. signupTime
       1. The date that walker signs up in app
    5. didDemandOrWalk
       1. Whether the walker did a walk or demand after his/her signup
       2. Value: Yes/No
    6. lifetime
       1. Date difference between signuptime and lastWalk (unit: Days)
    7. averageLifetime
       1. The tag that walker is in the app more or less than average of all walkers
       2. Value: Less/More
    8. averageWalk
       1. The tag that walker is done more or less walks than average of all walkers done. Compare walker total the walk count with average of all walkers
       2. Value: Less/More
    9. firstWalkAfterSignup
       1. Date difference between walker’s signup date and first walk date (Unit: Days)
    10. firstWalkinWeek
        1. The tag whether the walker walked in his first week in the application
    11. lastMonthWalks
        1. Number of walks done by walker in last 30 days
    12. activityTag
        1. The tag that measures walker’s activity
        2. Whether the walker made a demand or walk in last 30 days
        3. Values
           1. Active
           2. NotActive
    13. differentDistrictCount
        1. unique distinct number of districts that walker walked
    14. activeLifeTime
        1. time difference between last walk or last demand (later one) and fist walk of walker (last walk/ last demand - first walk)
    15. totalActiveDayCount
        1. total number of walk day: number of days that walker has walking
    16. walkFrequency
        1. activeLifeTime/totalActiveDayCount
    17. dailyWalkAverage
        1. totalWalk/totalActiveDayCount
    18. walksWithNoDemands
        1. Find walks done without any demand.
    19. totalDemandCount
        1. total demand count of walker has made
    20. last30DaysDemandCount
        1. total demand count in last 30 days by walker
    21. weeklyAverageDemandCount
        1. average demand count of walker in his active weeks (in weeks when he made walk demands)

# Walker Basic Cohort Table

## Description

* + 1. With this table, we aim to get walker cohort infos about walk service.

## Table Index

* + 1. yearMonth

## Table Columns

* + 1. First Service Count
    2. Retained Service Count
    3. Return From Loss Count
    4. Return From Passive Count

## Requirements

* + 1. Since walk data is cropped, even if walkers can have walks before, it should not be the concern. We should take account as the walk table is the all walk service data.
    2. All the labels should be considered from each walker’s perspective.
    3. A walk service should be labeled as ‘First Service’, if it is the walker's first service or the services that he/she has completed in his/her first 30 days after his/her first walk service.
    4. A walk service should be considered as ‘Return From Loss’, if the walker’s last completed service was more than 60 days. After the first ‘Return From Loss’ labeled service, all the services in 1 month should also be labeled as ‘Return From Loss’ for this specific walker.
    5. A walk service should be considered as ‘Return From Passive’, if the walker’s last completed service was in 30-60 days. After the first ‘Return From Passive’ labeled service, all the services in 1 month should also be labeled as ‘Return From Passive’ for this specific walker.
    6. A walk service should be labeled as ‘Retained’, if the walker also completed a service in 30 days and not labeled as other tags above.

# Walker Service Behaviour Analysis Eda

## Description

* + 1. With this analysis, we need some insights and deductions about walker’s completed services and their walk demand behaviors.
    2. Graphics and statistical approaches will be taken into account. Even if there is no meaningful result, all approaches are important.
    3. Comments and explanations are important, please be clear about explaining why you do this, what you expect, what you have found and maybe why, if it is explainable.