This file includes brief description of tables and measures used in HRIS report and relation between them.

Relationship among tables

Table 1	Table 2	Relationship	Joined on Column (Table 1)	Joined on Column (Table 2)
Requirement Vs Selection (with Optical Staff)	Requirement Vs Selection (without Optical Staff)	Many to Many	Centre Name	Centre Name
Employee Master	Attendance Data	One to Many	Employee Code	Employee Code
Employee Master	Attendance Data_Very Late	One to One	Employee Code	Employee Code
Employee Master	Vision Center Address	Many to One	Present Posting	Vision Center
Employee Master	Hospital Address Details	Many to One	Hospital	Hospital
Employee Master	Age and Tenure	One to One	Employee Code	Employee Code
Employee Master	Leaves Master	One to One	Employee Code	Employee Code
Date	Attrition Data	Many to Many	Month	Month & Year
Date	Attendance Data	Many to Many	Month	Month & Year
Date	Attendance Data_Very Late	Many to Many	Month	Month & Year
Date	Leaves Master	Many to Many	Month	Month & Year

Table Description

1. **Employee Master -** This table provides complete information of employee and their job location.
   a. **Employee Code –** Contains unique employee code.
   b. **Cadre –** Represents cadre of employee.
   c. **Department –** Represents department name of employee.
   d. **Birth Date –** Contains date of birth of employee.
   e. **Joining Date –** Contains date of joining of employee.
   f. **Employee Type –** Represents type of employee.
   g. **Designation –** Contains designation of employee.
   h. **Hospital –** Represents the hospital/ center name.
   i. **Posting –** Contains working area of employee.
   j. **Present Posting -** Contains present working area of employee.
   k. **Street Address –** Contains street address of employee`s home location.
   l. **District –** Contains district name of employee`s home location.

m. **City –** Contains city name of employee`s home location.

n. **Pincode –** Contains pin code of employee`s address.

o. **Street Address Complete –** Contains complete employee`s address.

p. **Base Hospital Latitude –** Contains latitude of base hospital.

q. **Base Hospital Longitude -** Contains longitude of base hospital.

r. **Vision Center Latitude -** Contains latitude of vision center.

s. **Vision Center Longitude -** Contains longitude of vision center.

t. **Employee Address Latitude –** Represent latitude of Employee Address.

u. **Employee Address Longitude -** Represent longitude of Employee Address.

v. **Distance (calculated column) –** Calculates distance between employee home location and employee work location.

Distance =
var Lat1 = 'Employee Master'[Employee Address Latitude]
var Lng1 = 'Employee Master'[Employee Address Longitude]
var Lat2 = if(ISBLANK('Employee Master'[Vision Center Latitude]), 'Employee Master'[Base Hospital Latitude], 'Employee Master'[Vision Center Latitude])
var Lng2 = if(ISBLANK('Employee Master'[Vision Center Longitude]), 'Employee Master'[Base Hospital Longitude], 'Employee Master'[Vision Center Longitude])
---- Algorithm here -----
var P = DIVIDE(PI(), 180)
*var A = 0.5 - COS((Lat2-Lat1) * p)/2 +*
  *COS(Lat1 * p) * COS(lat2 * P) * (1-COS((Lng2- Lng1) * p))/2*
*var final = 12742 * ASIN((SQRT(A)))*
return final

2. **Admissions Data** – This table contains admission information of each hospital.

   a. **Hospital Name** – Represents name of the hospital/center.

   b. **Number of Applications Issued** – Contains number of applications issued by hospital/center.

   c. **Number of Applications Received** – Contains number of applications received by hospital/center.

   d. **Number of Candidates Attended Interview** – Represents number of candidates who attended interview.

   e. **Number of Candidates called for Interview** – Represents number of candidates called for interview.

   f. **Number of Candidates under Waiting List** – Represents number of candidates put under waiting list.

   g. **Number of Candidates Rejected/Not Selected** – Represents number of candidates rejected.

   h. **Number of Candidates Selected** – Contains number of candidates selected after interview.

   i. **Number of Candidates Admitted** – Represents number of candidates who took admission.

   j. **Admission Ratio (measure)** – Calculates percentage of candidates who took admission after selection.

   Admission Ratio = DIVIDE(SUM ('Admissions Data'[Number of Candidates Admitted]), SUM ('Admissions Data'[Number of Candidates Selected]))

k. **Interview Ratio (measure)** – Calculates percentage of candidate who attended interview after being called for interview.

   Interview Ratio = DIVIDE(SUM ('Admissions Data'[Number of Candidates Attended Interview]), SUM ('Admissions Data'[Number of Candidates called for Interview]))

l. **Rejection Ratio (measure)** – Calculates percentage of candidates who have been rejected after interview.

   Rejection Ratio = DIVIDE(SUM ('Admissions Data'[Number of Candidates Rejected/Not Selected]), SUM ('Admissions Data'[Number of Candidates Attended Interview]))

m. **Selection Ratio (measure)** – Calculates percentage of candidates selected after interview.

   Selection Ratio = DIVIDE(SUM ('Admissions Data'[Number of Candidates Selected]), SUM ('Admissions Data'[Number of Candidates Attended Interview]))

3. **Requirement Vs Selection (With Optical Staff) –** This table provide information about number of candidates required and selected including optical staff by each center.

   a. **Centre Name –** Contains name of center.

   b. **Department** – Represents department name.

   c. **Candidate required** – Contains number of candidates required for department.

   d. **Candidate selected** – Contains number of candidates selected for department.

   e. **Year –** Contains the recruitment year

   f. **Requirement fulfilled (including Optical Staff) (measure) –** Represent how much requirement is fulfilled for department.

   Requirement fulfilled (including Optical Staff) = DIVIDE (SUM ('Requirement Vs Selection (With Optical Staff)'[Candidate selected]), SUM ('Requirement Vs Selection (With Optical Staff)'[Candidate required]))

4. **Requirement Vs Selection (Without Optical Staff) –** This table provide information about number of candidates required and selected excluding optical staff by each center

   a. **Centre Name –** Contains name of center.

   b. **Department** – Represent department name.

   c. **Candidate required** – Contains number of candidates required for department.

   d. **Candidate selected** – Contains number of candidates selected for department.

   e. **Requirement fulfilled (including Optical Staff) (measure) –** Represent how much requirement is fulfilled for each department.

   Requirement fulfilled (Without Optical Staff) = DIVIDE(SUM('Requirement Vs Selection (Without Optical Staff)'[Candidate selected]), SUM('Requirement Vs Selection (Without Optical Staff)'[Candidate required]))

5. **Age and Tenure –** This table provide information about employee`s age and work years.

   a. **Employee Code** – Represents Employee Code.

   b. **Birth Date** – Contains Date of Birth of Employee.

   c. **Joining Date** – Contains Date of Joining of Employee.

   d. **Cadre** – Represents Cadre of Employee.

   e. **Centre** – Represents name of center where Employee works.

f. **Employee Type** – Contains type of Employee.

g. **Department** – Contains Department name of Employee.

h. **Designation** – Represents designation of Employee.

i. **Present Posting** – Contains current working area of Employee.

j. **Age (calculated column)** – Contains age of Employee in years.

Age = DATEDIFF ('Age and Tenure'[Birth Date], TODAY(), DAY)/365

k. **Tenure (calculated column)** – Contains number of work years of Employee.

Tenure = DATEDIFF ('Age and Tenure'[Joining Date], TODAY(), DAY)/365

6. **Attendance Data –** This table provides information about Employee`s attendance

   a. **Attendance Date** – Contains date of attendance.

   b. **Employee Code** – Contains employee Code.

   c. **Cadre** – Represent cadre of employee.

   d. **Department –** Contains department name of employee.

   e. **On-Time –** Binary variable for capturing employees coming on-time

   f. **Late –** Binary variable for capturing employees coming late

   g. **Very Late –** Binary variable for capturing employees coming very late

   h. **On Duty -** Binary variable for capturing employees working in other locations and are on-duty

   i. **Absent –** Binary variable for capturing employee's absent

   j. **Year (calculates column) –** Contains year extracted from 'Attendance Date'.

   Year = 'Attendance Data'[Attendance Date].[Year]

   k. **Month & Year (calculated column) –** Contains month and year extracted from 'Attendance Date'.
   Month & Year = FORMAT ('Attendance Data'[Attendance Date], "mmm") & ", " & 'Attendance Data'[Year]

   l. **Absent/Not Punched Percentage (measure)-** Calculates percentage of absent/not punched employee.

   Absent/Not Punched Percentage = DIVIDE(SUM ('Attendance Data'[Absent]), [Grand Total])

   m. **Late Percentage (measure)** – Calculate percentage of late employee.

   Late Percentage = DIVIDE(SUM ('Attendance Data'[Late]), [Total Attendance])

   n. **On-Time Attendance Percentage (measure) –** Calculate percentage of employee punched-in On-time.

   On-Time Attendance Percentage = DIVIDE(SUM ('Attendance Data'[On-Time]), [Total Attendance])

   o. **Total Attendance (measure)** – Calculate percentage of employees who are present.

   Total Attendance = SUM ('Attendance Data'[On-Time]) + SUM ('Attendance Data'[Late]) + SUM ('Attendance Data'[Very Late])

   p. **Grand Total (measure) –** Calculates sum of 'On-Time', 'Late', 'Very Late', 'Absent', 'On Duty'.

   Grand Total = SUM('Attendance Data'[On-Time]) + SUM('Attendance Data'[Late]) + SUM('Attendance Data'[Very Late]) + SUM('Attendance Data'[Absent]) + SUM('Attendance Data'[On Duty])

7. **Attendance Data_Very Late –** This table provides information about attendance for very late category employees
    a. **Employee Code** – Contains employee Code.
    b. **Cadre** – Represent cadre of employee.
    c. **Department –** Contains department name of employee.
    d. **month_no –** Represents the month in numerals
    e. **Month –** Represents the month in text
    f. **Year –** Represents the year
    g. **Month & Year –** Represents the date in mmm, yyyy format
    h. **veryLate –** Represents the count of days that the employee was very late
    i. **Chronic Late Comers count (measure) –** Represents the count of employees who are chronic late comers

       Chronic Late Comers count = 'Attendance Data_Very Late'[Very Late Percentage] * DISTINCTCOUNT('Attendance Data_Very Late'[Employee Code])
    j. **isVeryLate (calculated column) -** Binary variable for checking if employee is a Chronic Late Comer

       isVeryLate = if(DIVIDE('Attendance Data_Very Late'[verylate], 'Attendance Data_Very Late'[totalpunched]) > 0.12, 1, 0)
    k. **Very Late Percentage (measure) –** Represents the percentage of Chronic Late Comers

       Very Late Percentage = DIVIDE(SUM('Attendance Data_Very Late'[isVeryLate]), COUNT('Attendance Data_Very Late'[Employee Code]))

8. **Attrition Data** – This table provides information about number of employees in starting, joined, left for each month in a particular year.
    a. **Cadre**- Contains name of cadre.
    b. **Department**- Represents department name.
    c. **Month** – Contains month name.
    d. **Year** – Contains year.
    e. **Month & Year** – Represents combined month and year information.
    f. **Opening Employee** – Contains number of employees at the start of 'Month & Year'.
    g. **Left Employee** - Contains number of employees who left in 'Month & Year'.
    h. **New Employee** - Contains number of employees joined at time 'Month & Year'.
    i. **Closing Employee** - Contains number of employees at the end of 'Month & Year'.
    j. **Attrition Rate (measure)** – Calculates percentage of employee who left or resigned, i.e. attrition.

       Attrition Rate = DIVIDE (SUM ('Attrition Data'[Left Employee]),
       SUM ('Attrition Data'[Opening Employee]) + SUM('Attrition Data'[New Employee]))

9. **Attrition Data for Trend** – This table provide attrition breakup for year 2010 to 2018.
    a. **Batch** – Represents batch year.
    b. **MLOP Recruitment**- Represents number of MLOP candidates recruited.

c. **1ˢᵗ year Trainee** – Contains number of trainee who left within 1 year of training.

d. **2ⁿᵈ year Trainee** – Contains number of trainee who left in second year of training.

e. **I year Employee** – Represent number of employees who left in first year of their job.

f. **II year Employee**- Represent number of employees who left in second year of their job.

g. **III year Employee** - Represent number of employees who left in third year of their job.

h. **IV year Employee**- Represent number of employees who left in fourth year of their job.

i. **V year Employee** - Represent number of employees who left in fifth year of their job.

j. **VI year Employee & Above** - Represent number of employees who left in six years or after that.

k. **Total Employee Left** - Contains total number of employees who left from that batch.

l. **MLOPs Currently Working**- Contains total number of employees currently working from that batch.

m. **1ˢᵗ year Trainee Attrition (measure)**- Calculates attrition percentage of first year trainee

   1st year Trainee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[< 1 year Trainee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

n. **2ⁿᵈ year Trainee Attrition (measure)** - Calculates attrition percentage of second year trainee.

   2nd year Trainee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[2nd year Trainee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

o. **I year Employee Attrition (measure)** - Calculates attrition percentage of employees left in first year.

   I year Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[I year Employee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

p. **II year Employee Attrition (measure)-** Calculates attrition percentage of employees left in second year.

   II year Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[II year Employee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

q. **III year Employee Attrition (measure)** - Calculates attrition percentage of employees left in third year**.**

   III year Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[III year Employee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

r. **IV year Employee Attrition (measure)** - Calculates attrition percentage of employees left in fourth year.

   IV year Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[IV year Employee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

s. **V year Employee Attrition (measure)** - Calculates attrition percentage of employees left in fifth year.

   V year Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[V year Employee]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

t. **VI year and above Employee Attrition (measure)** - Calculates attrition percentage of employee left in six years and after that.

   VI year and above Employee Attrition = DIVIDE(SUM('Attrition 2010 - 2018'[VI year Employee & Above]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

u. **Overall Attrition (MLOP) (measure) –** Calculates overall attrition rate for complete batch

Overall Attrition (MLOP) = DIVIDE(SUM('Attrition 2010 - 2018'[Total Employee Left]), SUM('Attrition 2010 - 2018'[MLOP Recruitment]))

10. **Hospital Address Details -** This table provides information about hospital name and its location.
    a. **Hospital –** Contains hospital/center name.
    b. **Address** – Contains street address of hospital.
    c. **City** – Represent city of hospital.
    d. **Pincode**- Contains pin code of hospital city.
    e. **State** – Represents state name of hospital.
    f. **Country**- Contains name of the country.
    g. **Latitude** – Contains latitude of hospital location.
    h. **Longitude**- Contains longitude of hospital location.

11. **Vision Center Address** - This table provides information about vision center`s name and its location.
    a. **Base Hospital** – Contains name of base hospital.
    b. **Vision Center** – Represent name of vision center.
    c. **Address** – Contains street address of vision center.
    d. **City** – Represent city of vision center.
    e. **Town** – Contains town of vision center.
    f. **Pincode** – Contains pin code of vision center city.
    g. **State** – Contains state name of vision center.
    h. **Country** – Represent name of country.
    i. **Latitude** – Contains latitude of vision center location.
    j. **Longitude** – Contains longitude of vision center location.

12. **Date** – This table contains information related to date.
    a. **Date** – Creates calendar from 1st date to last date from Attendance Date
       Date = CALENDAR (FIRSTDATE('Attendance Data'[Attendance Date].[Date]), LASTDATE('Attendance Data'[Attendance Date].[Date]))
       Month – **Extract month and year from 'Date' column in specific format.**
       Month = FORMAT('Date'[Date], "mmm") & ", " & 'Date'[Date].[Year]
    b. **Year** – Extract year from 'Date' column.
       Year = 'Date'[Date].[Year]
    c. **Time Period (measure) -** The period for which report is shown**.**

13. **Leaves Master** – This table provides information about leaves utilization by employees
    a. **Employee Code** – Contains unique employee code.
    b. **Leave Type** – Represents the reason for leave.
    c. **Leaves Available** – Contains number of leaves available.
    d. **Leaves Availed** – Represents total number of leaves taken.
    e. **accounting_month** – Represents the month in numerals.

f. **Year** – Represents the year information.
g. **Month (Calculated Column)** – Represents the month in letters
h. *FORMAT(DATE(1, 'Leaves Master'[accounting_month], 1), "MMM")*
i. **Month & Year (Calculated Column)** – Contains month and year
j. *Month & Year = 'Leaves Master'[Month] & ", " & 'Leaves Master'[Year]*
k. **Leaves Remaining (measure)** – Calculates the leave balance.
l. *Leaves Remaining = SUM('Leaves Master'[Leaves Available]) - SUM('Leaves Master'[Leaves Availed])*
m. **Average Leaves Availed (measure)** – Calculates average leaves taken by employees.
n. *Average Leaves Availed = DIVIDE(SUM('Leaves'[Leaves Availed]), SUM('Leaves'[Employees]))*