So, Research Project table is used as a base, and there is one field in each of the other tables that is joined with this table using Project ID and Profile ID. More details below:

**On Research Project Table:**

1. Total Mahesh Amount is calculated by summing up NIH Mahesh Amount, Fed Mahesh Amount, and Non Fed Amount

2. Total Cost is calculated by adding up Fed Direct cost, Non Fed direct cost, and NIH Direct Cost

3. Mahesh Division is calculated by using the below, and all the names are converted to lower case for ease of use

IF [FED\_Mahesh\_DIVISION] != "NULL" Then

                Lowercase([FED\_Mahesh\_DIVISION])

ELSE

                IF [NIH\_Mahesh\_DIVISION] != "NULL" Then

                                Lowercase([NIH\_Mahesh\_DIVISION])

                ELSE

                                IF [NON\_FED\_Mahesh\_DIVISION] != "NULL" THEN

                                                Lowercase([NON\_FED\_Mahesh\_DIVISION])

                                ELSE

                                                "No Mahesh division name found"

                                ENDIF

                ENDIF

ENDIF

**Join with Research Profile table to include Institution Name (Assumption - one to one mapping between Profile ID and Institution Name)**

4. JOIN Research Profile table using Profile ID, and pull Institution Name

5. Convert Institution name to lowercase

**Join with Diagnosis table to include Diagnosis Areas**

6. Each project has many diagnosis areas. So, a simple join of the tables will bloat the Mahesh amounts as there will be multiple entries for each project with multiple diagnosis areas.

7. So, a new column is created joining (separated ;) all the diagnosis areas for each Project and Profile combination. [Query - Group by Project ID, Profile ID and concatenate Diagnosis Areas]

**Join with Ages table**

8. Followed a similar logic as explained above. A new column, Age Brackets, to concatenate all the age groups (separator - ,)

9. If the age bracket contains "Across all ages", Age bracket is defaulted to "Across all ages", otherwise left as is.

E.g "Young Adult (19-25);Adult (26-44);Middle Age (45-64);Older Adult (65-79);Oldest Old (80+);Across all ages/Population-based" is stored as "Across all ages/Populated-based"

If Contains([Concat\_Age Brackets], "Across all ages",1) Then

"Across all ages/Population-based"

Else

                Lowercase([Concat\_Age Brackets])

ENDIF

10. Convert Age brakcet to Lowercase

**Join with ICF table**

11. Followed a similar logic as explained above. A new column, ICF Description, is created to concatenate all ICF Areas (separator ,)

12. Convert ICF Descriptions to Lowercase

**Join with Agenda table**

12. Followed a similar logic as explained above. A new column, Agenda Description, is created to concatenate all Agenda Descriptions (separator - ,)

13. Convert Agenda Descriptions to Lowercase

**Join with Project Setting table**

14. Followed a similar logic as explained above. A new column, Project Setting Description, is created to concatenate all Project Settings (separator - ,)

15. Convert Project Setting Description to Lowercase