

# Dax functions that I have applied in This Project:

# 01:

```
Calendar = ADDCOLUMNS(
    CALENDAR(MIN('craditcard card_data'[Date]), MAX('craditcard card_data'[Date])),
    "Year", YEAR([Date]),
    "Month", FORMAT([Date], "MMM"),
    "MonthNum", MONTH([Date]),
    "Day", DAY([Date]),
    "Weekday", FORMAT([Date], "ddd"),
    "WeekOfMonth",
        INT((DAY([Date]) - 1) / 7) + 1, -- Integer week number within the month
    "Week", WEEKNUM([Date], 1), -- Assuming you want to keep the original week number within the
year
    "Qtr", "Q" & QUARTER([Date])
)
```

# 02:

```
Age_group = SWITCH(
    TRUE(),
    'craditcard customer_data'[customer_age] < 30, "20-30",
    'craditcard customer_data'[customer_age] >= 30 && 'craditcard customer_data'[customer_age] <
40, "30-40",
    'craditcard customer_data'[customer_age] >= 40 && 'craditcard customer_data'[customer_age] < 50,
"40_50",
    'craditcard customer_data'[customer_age] >= 50 && 'craditcard customer_data'[customer_age] < 60,
"50-60",
    'craditcard customer_data'[customer_age] >= 60, "60+",
    "Unknown"
)
```

# 03:

```
Income_Group = SWITCH(
    TRUE(),
    'creditcard customer_data'[income] >= 50000 && 'creditcard customer_data'[income] <= 80000, "High income",
    'creditcard customer_data'[income] >= 25000 && 'creditcard customer_data'[income] < 50000, "Medium income",
    'creditcard customer_data'[income] < 25000, "Low income",
    "Unknown"
)
```

# 04:

```
% = DIVIDE([Current_Week]-[previous_week_],[previous_week_])
```

05:

```
% Current_week vs Previous_week =
DIVIDE([Current_Week], [previous_week_], 0)
```

# 06:

```
Current_Week = CALCULATE(
    SUM('creditcard card_data'[Revenue]),
    FILTER(
        ALL('Calendar'),
        'Calendar'[Week] = MAX('Calendar'[Week])
    )
)
```

# 07:

```
previous_week_ = CALCULATE(
    SUM('creditcard card_data'[Revenue]),
    FILTER(
        ALL('Calendar'),
        'Calendar'[Week] = MAX('Calendar'[Week]) - 1
    )
)
```

# 08:

Filters =

VAR marital\_status\_top = RANKX(ALL('creditcard customer\_data'[marital\_status]), [Total\_Revenue])

VAR marital\_status\_bottom = RANKX(ALL('creditcard customer\_data'[marital\_status]), [Total\_Revenue], , ASC)

VAR customer\_job\_top = RANKX(ALL('creditcard customer\_data'[customer\_job]), [Total\_Revenue])

VAR customer\_job\_bottom = RANKX(ALL('creditcard customer\_data'[customer\_job]), [Total\_Revenue], , ASC)

VAR state\_top = RANKX(ALL('creditcard customer\_data'[state\_cd]), [Total\_Revenue])

VAR state\_bottom = RANKX(ALL('creditcard customer\_data'[state\_cd]), [Total\_Revenue], , ASC)

VAR income\_group\_top = RANKX(ALL('creditcard customer\_data'[Income\_Group]), [Total\_Revenue])

VAR income\_group\_bottom = RANKX(ALL('creditcard customer\_data'[Income\_Group]), [Total\_Revenue], , ASC)

VAR education\_top = RANKX(ALL('creditcard customer\_data'[education\_level]), [Total\_Revenue])

VAR education\_bottom = RANKX(ALL('creditcard customer\_data'[education\_level]), [Total\_Revenue], , ASC)

VAR \_CheckRank =

IF(

CONTAINSSTRING(SELECTEDVALUE(Selectedfield[Selectedfield Fields]), "marital\_status"),

IF(SELECTEDVALUE('Select'[Select]) = "Top", marital\_status\_top, marital\_status\_bottom),

IF(

CONTAINSSTRING(SELECTEDVALUE(Selectedfield[Selectedfield Fields]), "customer\_job"),

IF(SELECTEDVALUE('Select'[Select]) = "Top", customer\_job\_top, customer\_job\_bottom),

IF(

CONTAINSSTRING(SELECTEDVALUE(SelectField[SelectField Fields]), "state"),

IF(SELECTEDVALUE('Select'[Select]) = "Top", state\_top, state\_bottom),

IF(

CONTAINSSTRING(SELECTEDVALUE(Selectedfield[Selectedfield Fields]), "income\_group"),

IF(SELECTEDVALUE('Select'[Select]) = "Top", income\_group\_top, income\_group\_bottom),

IF(

```

CONTAINSSTRING(SELECTEDVALUE(Selectedfield[Selectedfield Fields]), "education"),
IF(SELECTEDVALUE('Select'[Select]) = "Top", education_top, education_bottom),
BLANK() // Default case
)
)

)
)
)
RETURN
IF(
    _CheckRank <= 'Choose Rank'[Choose Rank Value],
    [Total_Revenue], // Return Total Revenue if within the rank
    BLANK() // Hide row if not within rank
)

#9:
total interst_earn = SUM('creditcard card_data'[interest_earned])

# 10:
total transaction = SUM('creditcard card_data'[total_trans_amt])

# 11:
Total_Revenue = SUM('creditcard card_data'[Revenue])

# 12:
Weekly Revenue =
FORMAT([Current_Week] - [previous_week_], "$#,##0;-$$#,##0")

```

# 13:

```
Ranking = VAR_top_expend = RANKX(ALL('creditcard card_data'[expenditure_type]), [Total_Revenue])  
// Defaults to descending order
```

```
VAR_bottom_expend = RANKX(ALL('creditcard card_data'[expenditure_type]), [Total_Revenue], , ASC)
```

```
VAR_top_customer_job = RANKX(ALL('creditcard customer_data'[customer_job]), [Total_Revenue]) //  
Defaults to descending order
```

```
VAR_bottom_customer_job = RANKX(ALL('creditcard customer_data'[customer_job]), [Total_Revenue], ,  
ASC)
```

```
VAR_top_Education = RANKX(ALL('creditcard customer_data'[education_level]), [Total_Revenue]) //  
Defaults to descending order
```

```
VAR_bottom_Education = RANKX(ALL('creditcard customer_data'[education_level]), [Total_Revenue], ,  
ASC)
```

```
VAR_CheckRank =
```

```
IF(  
    CONTAINSSTRING(SELECTEDVALUE(SelectField[SelectField Fields]), "expenditure_type"),  
    IF(SELECTEDVALUE('Select'[Select]) = "Top", _top_expend , _bottom_expend),  
    IF(  
        CONTAINSSTRING(SELECTEDVALUE(SelectField[SelectField Fields]), "customer_job"),  
        IF(SELECTEDVALUE('Select'[Select]) = "Top", _top_customer_job, _bottom_customer_job),  
        IF(SELECTEDVALUE('Select'[Select]) = "Top", _top_Education, _bottom_Education)  
    )  
)
```

```
RETURN
```

```
IF(  
    _CheckRank <= 'Choose Rank'[Choose Rank Value], [Total_Revenue], // Return Total revenue if within  
    rank  
    BLANK() // Hide row if not within rank  
)
```

# 14:

```
Selectedfield = {  
    ("customer_job", NAMEOF('craditcard customer_data'[customer_job]), 0),  
    ("dependent_count", NAMEOF('craditcard customer_data'[dependent_count]), 1),  
    ("education_level", NAMEOF('craditcard customer_data'[education_level]), 2),  
    ("Income_Group", NAMEOF('craditcard customer_data'[Income_Group]), 3),  
    ("marital_status", NAMEOF('craditcard customer_data'[marital_status]), 4)  
}
```

# 15:

```
SelectField = {  
    ("exp_type", NAMEOF('craditcard card_data'[expenditure_type]), 0),  
    ("customer_job", NAMEOF('craditcard customer_data'[customer_job]), 1),  
    ("education_level", NAMEOF('craditcard customer_data'[education_level]), 2)  
}
```