

# COGNIFYZ TECHNOLOGY INTERNSHIP PROJECT- POWERBI

## INVESTMENT DATA ANALYSIS

This project highlights the investment details about the age, gender, purpose, objective, along with reasons of the investment and source of information in the following fields of avenues like Debentures, fixed deposits, equity, Public provident fund, Gold, Government bonds, and Mutual funds.

**Actions performed while handling the tasks includes-**

- **Data handling-** Identify the dataset, explore data types, identify the problem
- **Data cleaning-** Removing duplicates, spaces, fix structural errors
- **Data processing-** collecting the data and process it
- **Data importing-** extract the data in tools like PowerBI
- **Data visualization-** Analyze the data and create effective charts for the visualization

Before performing the tasks few calculation that has been performed for analyzing the data by using **Microsoft EXCEL- (USING CONDITION STATEMENT)**

index	Order ID	Date	Status	Fulfillment	Sales Channel	ship-service-level	Category	Size	Courier Status
1	405-80787	4/30/2022	Cancelled						
2	171-91981	4/30/2022	Shipped - Delivered to Buyer						
3	404-06876	4/30/2022	Shipped	Amazon	Amazon.in	Expedited	Shirt	XL	Shipped
4	403-96153	4/30/2022	Cancelled	Merchant	Amazon.in	Standard	Blazer	L	On the Way

FIG-1

gender	age	Invested	Mutual Fund	Equity	Debenture	Government	Fixed Deposit	PPF	Gold	Stock Market	stock market	Factor	Objective	Purpose	Duration	Investment
Female	34	Yes	1	2	5	3	7	6	4	No		1	Returns	Capital Accumulation	Wealth Creation	1-3 years
Female	23	Yes	4	3	2	1	5	6	7	No		2	Locking Period	Capital Accumulation	Wealth Creation	More than 3 years
Male	30	Yes	3	6	4	2	5	1	7	Yes		1	Returns	Capital Accumulation	Wealth Creation	3-5 years

FIG-2

Fulfillment	sales channel	Sales Channel	ship-service-level	Category	Size	Courier Status	Qty	Amount	ship-city	ship-state	ship-country
Merchant	1	Amazon.in	Standard	T-shirt	S	On the Way	1	0	647.62	MUMBAI	MAHARASHTRA
Merchant	2	Amazon.in	Standard	Shirt	M	Shipped	1	106	BENGALURU	KARNATAKA	

FIG-3

# TASK1-DATA EXPLORATION AND SUMMARY

**Objective-** Understand and summarize key statistics in the dataset.

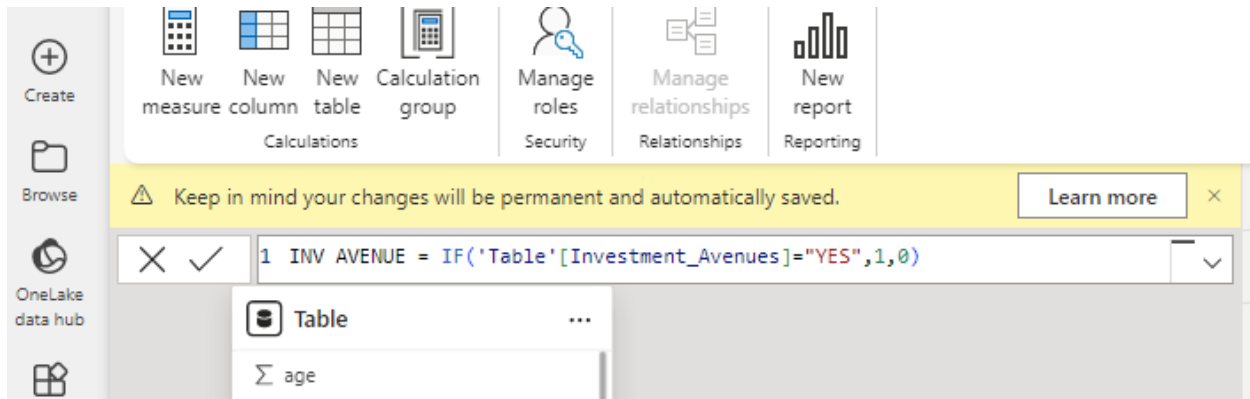


FIG-4

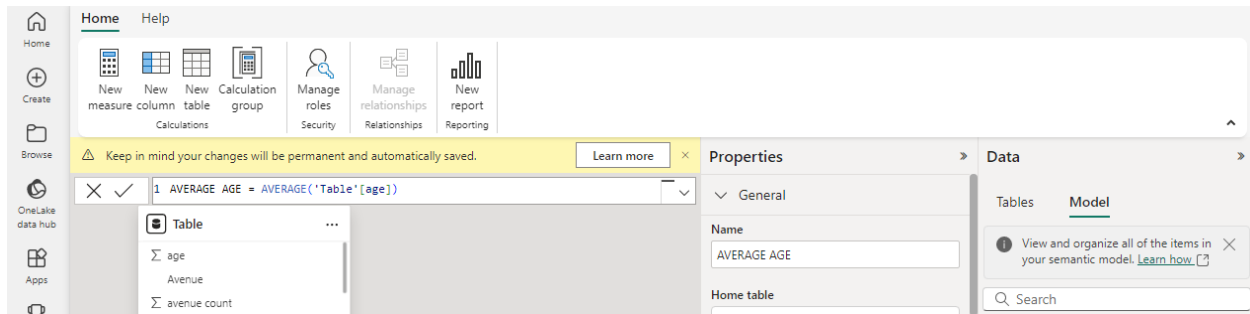


FIG-5

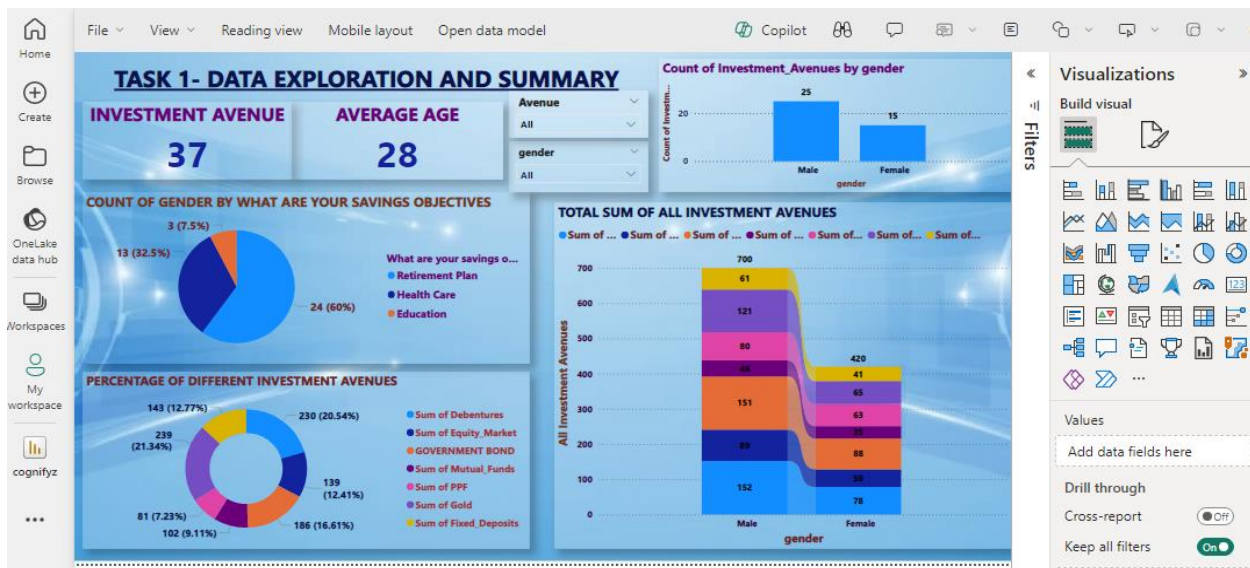


FIG-6

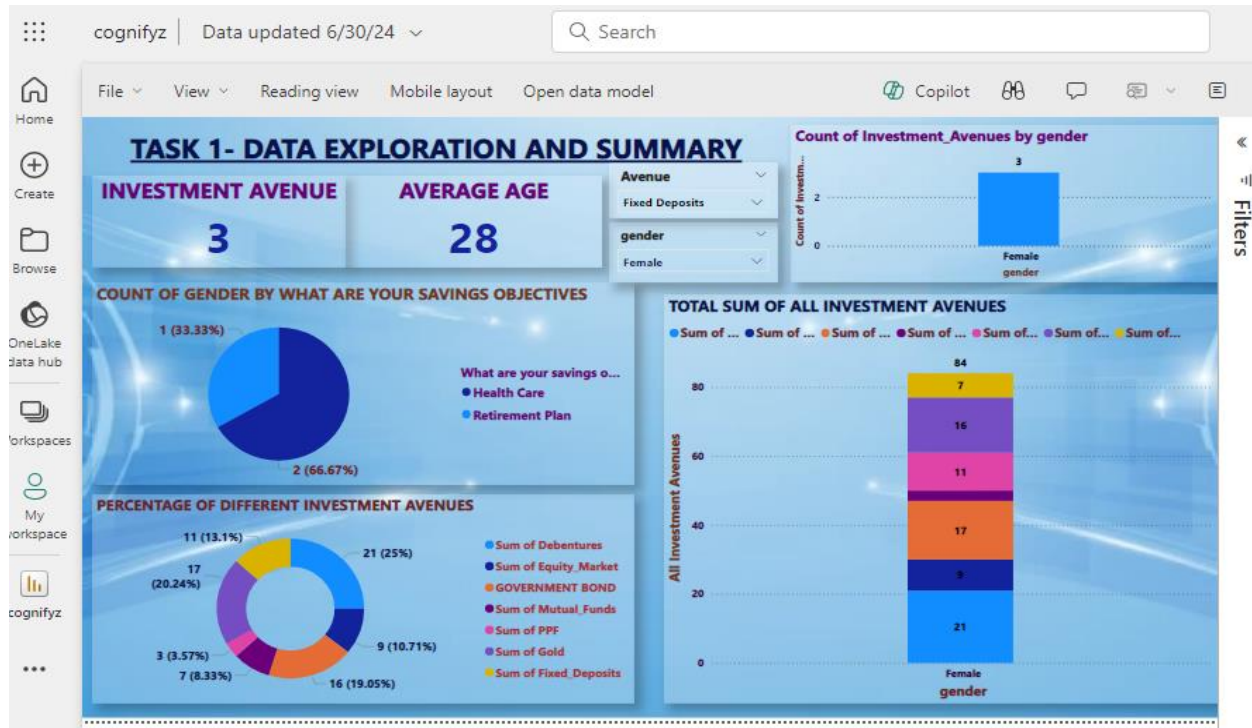


FIG-7

#### Actions performed-

- Count the total number of investors- 37
- Average age of the investors is approx. 28
- (Fig-6)-A clustered column chart shows the count of investment avenues on basis of gender
- A pie chart shows what are the savings objectives
- The doughnut chart shows the percentage of different avenues- like equity, debentures
- The stacked column chart shows the total number of summation of all avenues
- In this chart shows that sum of gold is the highest=239(21%) and retirement plan among savings objectives is the highest
- (Fig-7)- it shows the analysis of female with fixed deposits where investment avenue is 3 and summation of investment avenue also changes like(summation of debentures= 25%(21))
- Overall this chart shows the summary of all the investment avenues

**TASK2-GENDER BASED ANALYSIS**

**Objective-** Analyze and visualize gender-based differences in investment preferences

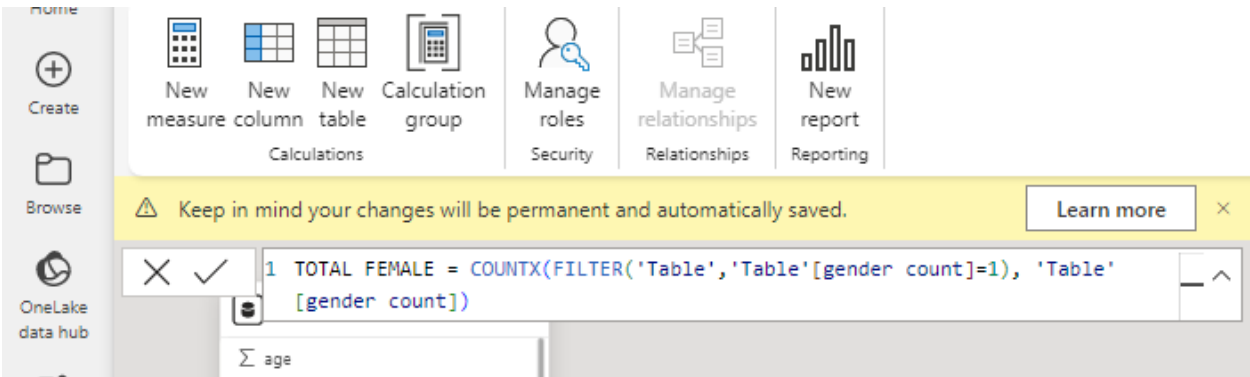


FIG-8

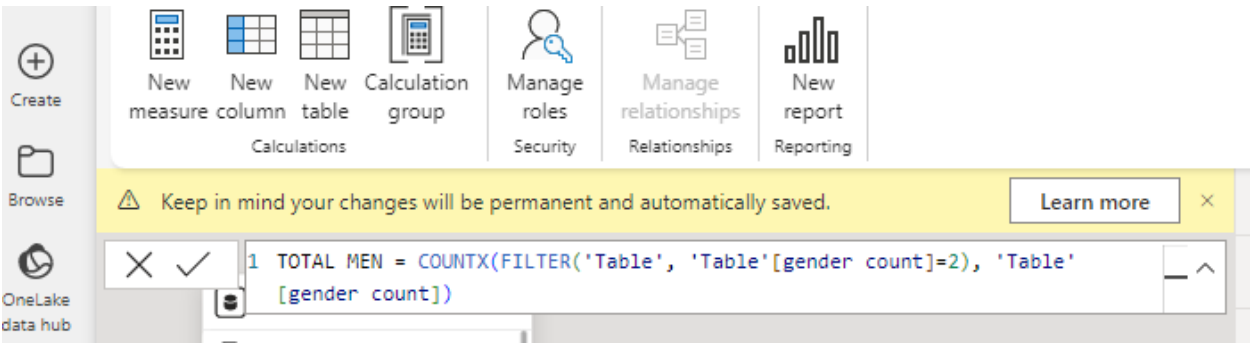


FIG-9

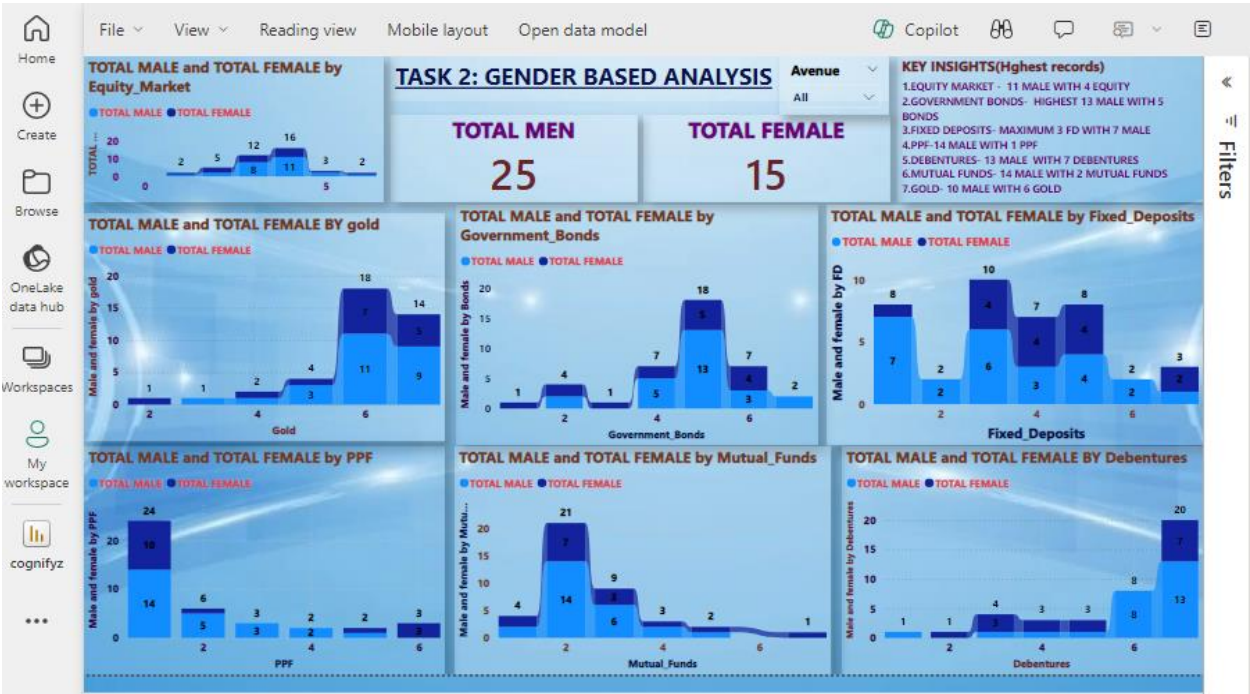


FIG-10



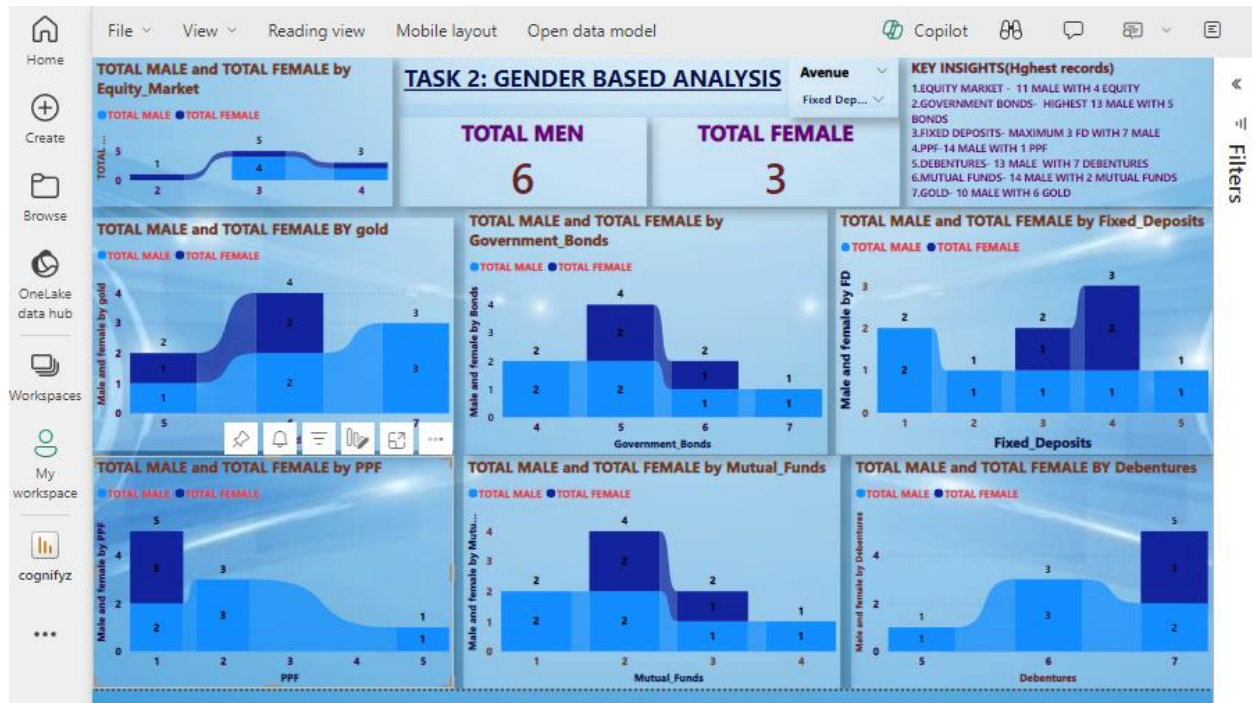


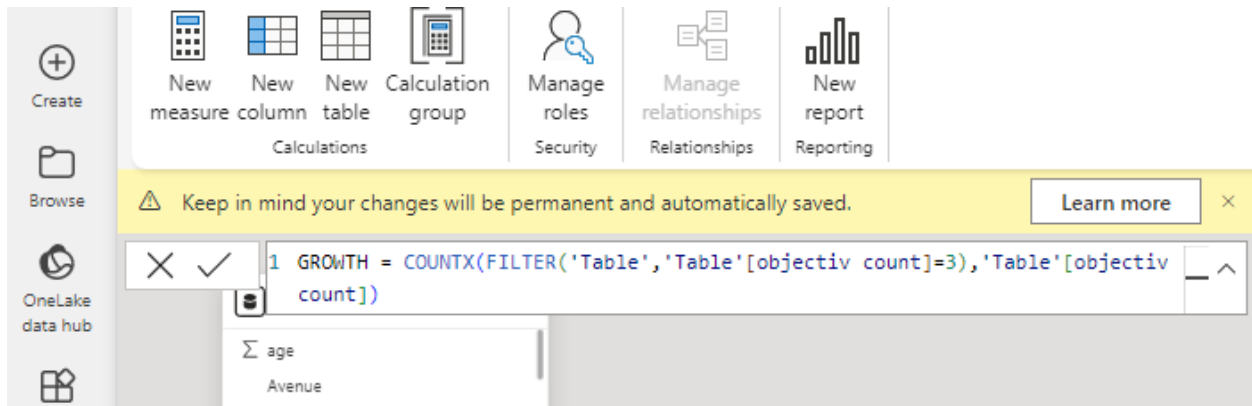
FIG-11

### Actions performed-

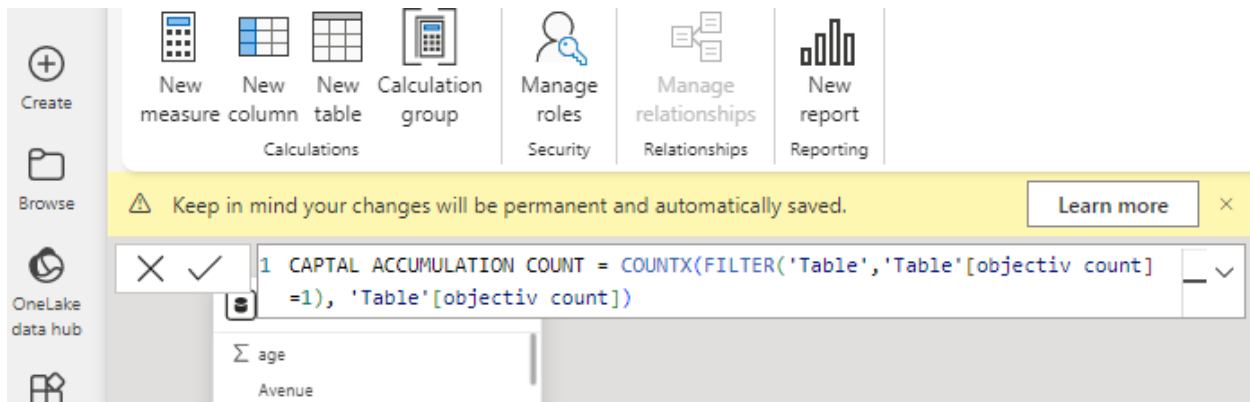
- Total male and female is 25 and 15 respectively.
- (Fig 10)-This Dashboard depicts the individual analysis of all the investment avenues based of gender
- The values changes based on avenues shown in SLICER
- Key insights have been shown in the top right corner for the highest records
- Mostly Male invested higher in all fields
- 15 male and 7 female invested in 6 Gold and
- 14 male and 7 female invested in 2 mutual funds
- Out of total 10 fixed deposits 6 male and 4 female invested in 3 fixed deposits.
- (Fig-11)-depicts analysis on choosing fixed deposits, where 3 male and 2 female invested in 1 PPF and others are shown

## **TASK 3- OBJECTIVE ANALYSIS**

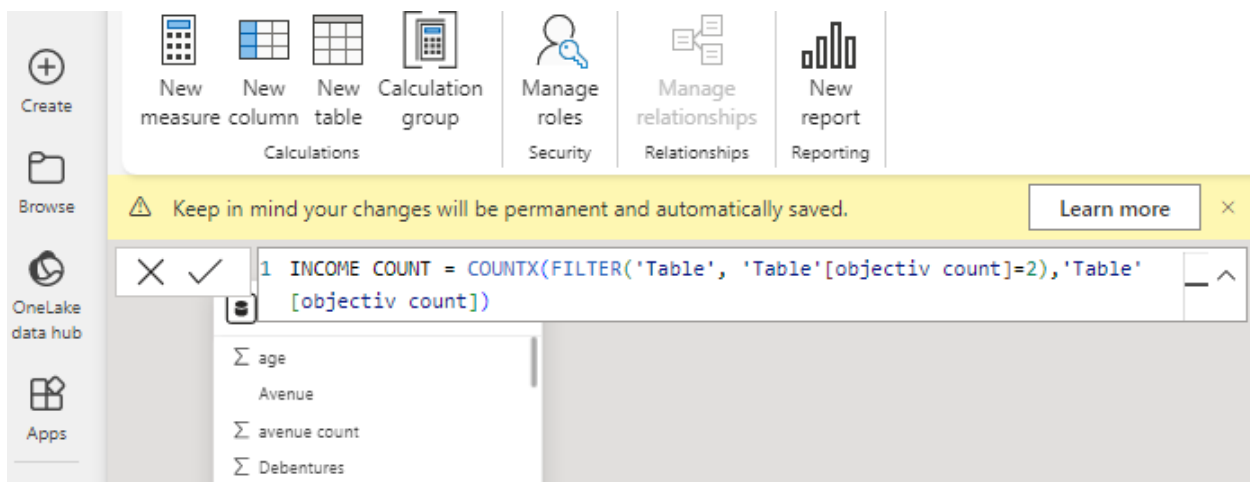
**Objective-** Analyze the relationship between savings objectives and investment choices.



**FIG-12**



**FIG-13**



**FIG-14**

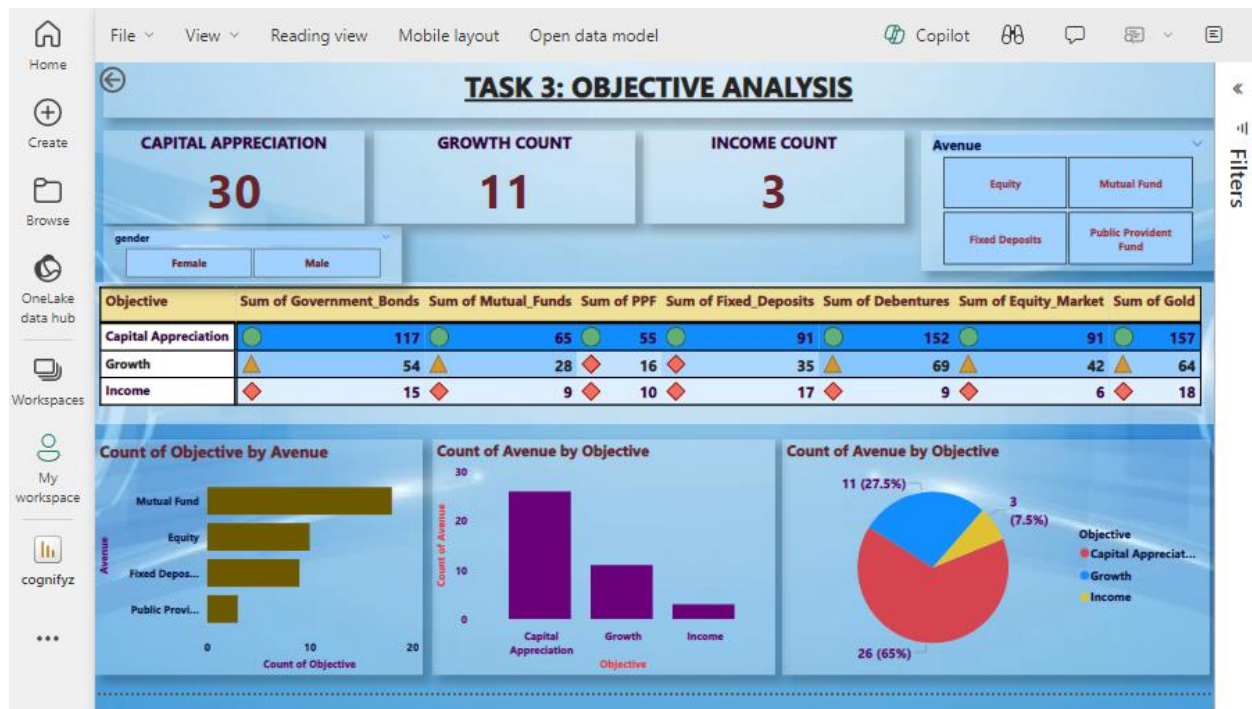


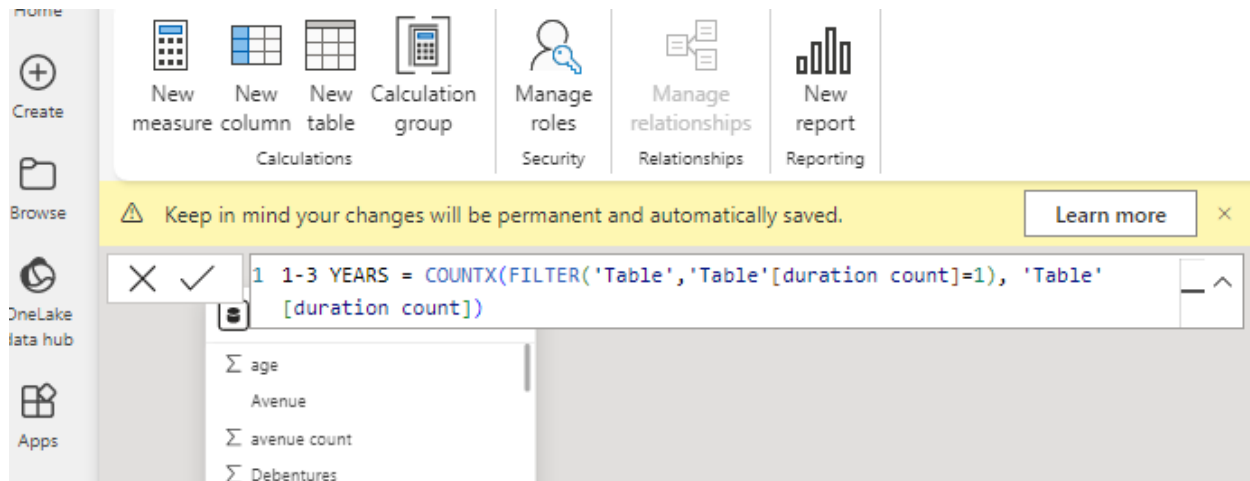
FIG-15

### Actions performed-

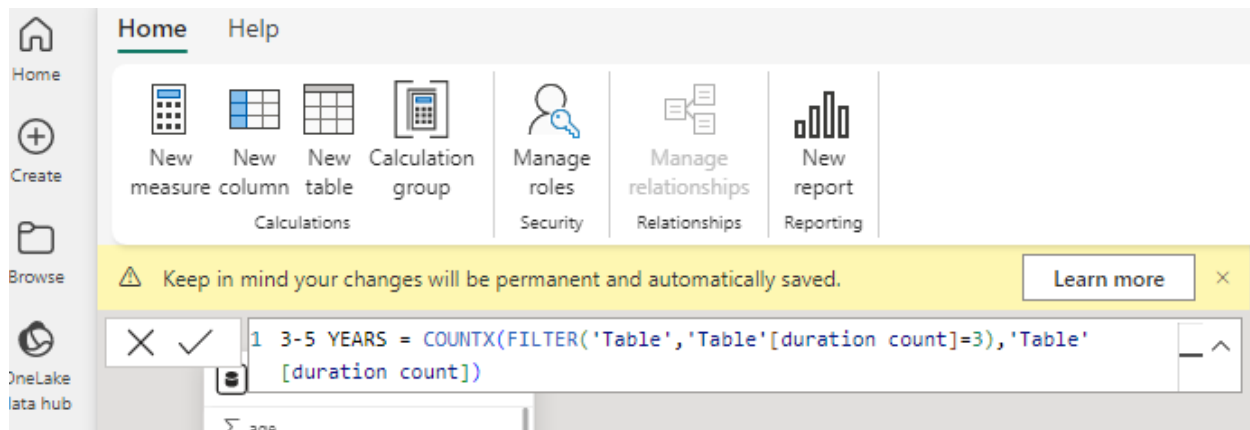
- The Card represents the total capital appreciation is 30
- It also shows the growth count is 11
- It also represent the total income count is 3
- The slicer represents the four avenues that is Equity, Mutual Fund, Fixed Deposits and PPF
- The matrix shows each objective with how many total number of investment avenues (like Bonds, PPF etc.)
- The bar chart represents the count of objective by avenue where Mutual Fund is the highest
- The clustered column chart represents the objectives where Capital appreciation is the highest
- The pie chart depicts the percentage of all the objectives that is capital appreciation is the highest with 65%, and Income is the lowest with 3%
- Hence this Dashboard represents various charts with the aim to find the correlation between the objectives and different avenues.

## **TASK 4-INVESTMENT DURATION AND FREQUENCY**

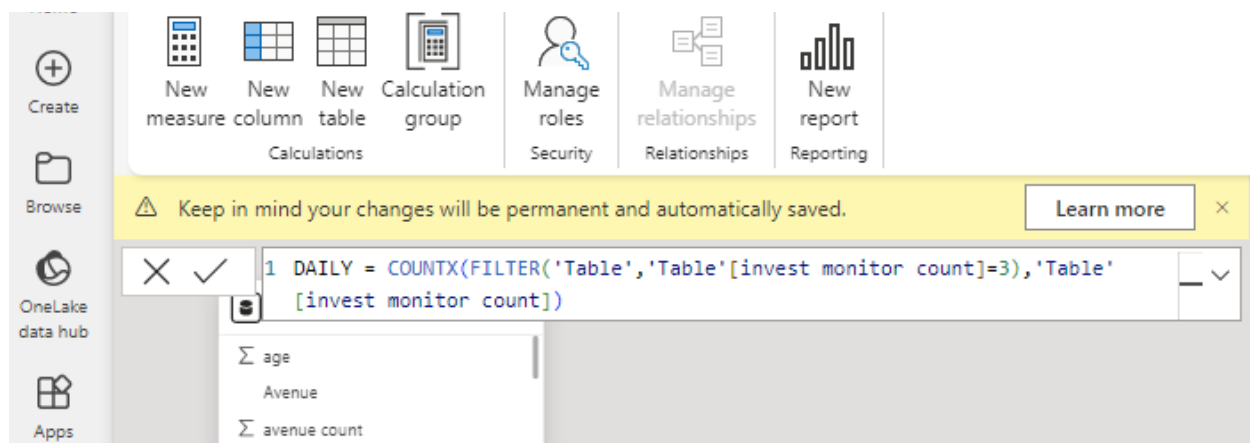
**Objective-** Analyze investment durations and monitoring Frequencies



**FIG-16**



**FIG-17**



**FIG-18**



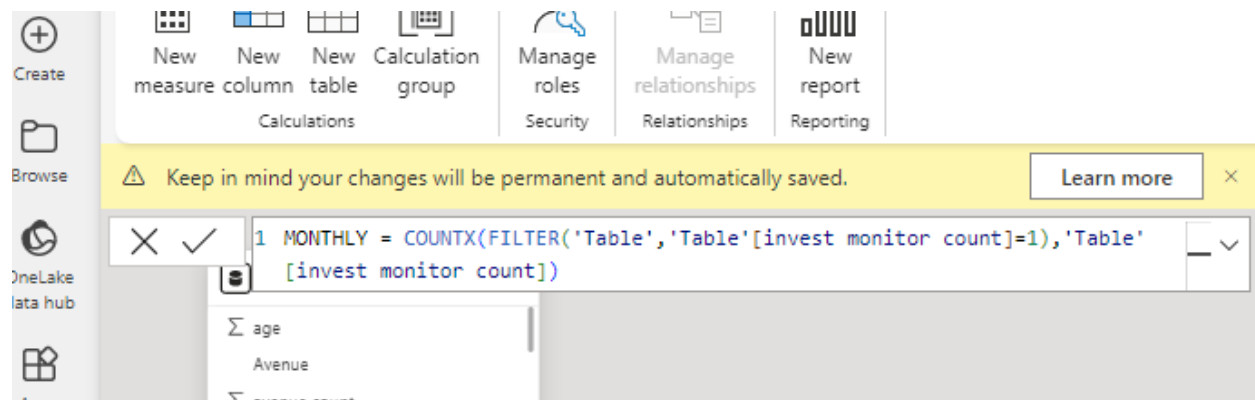


FIG-19

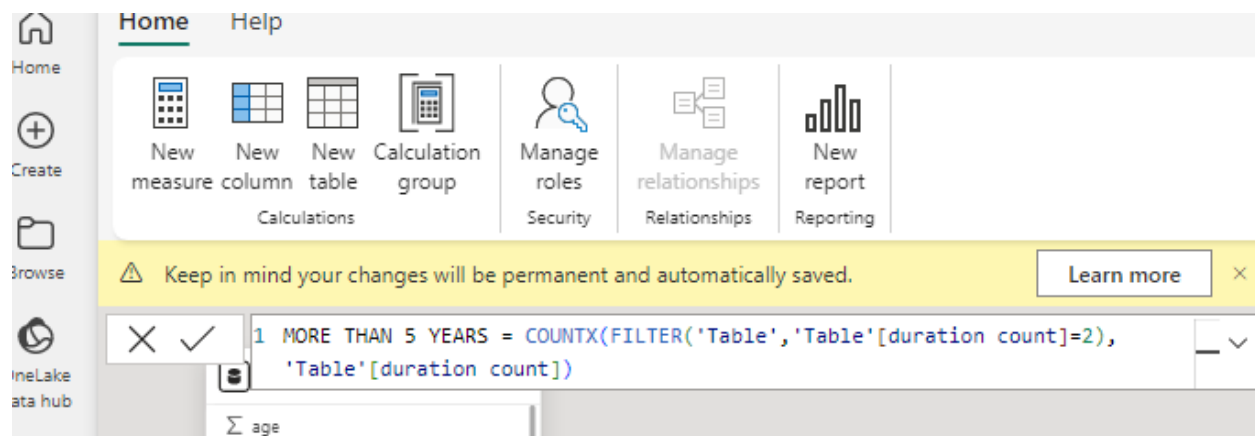


FIG-20

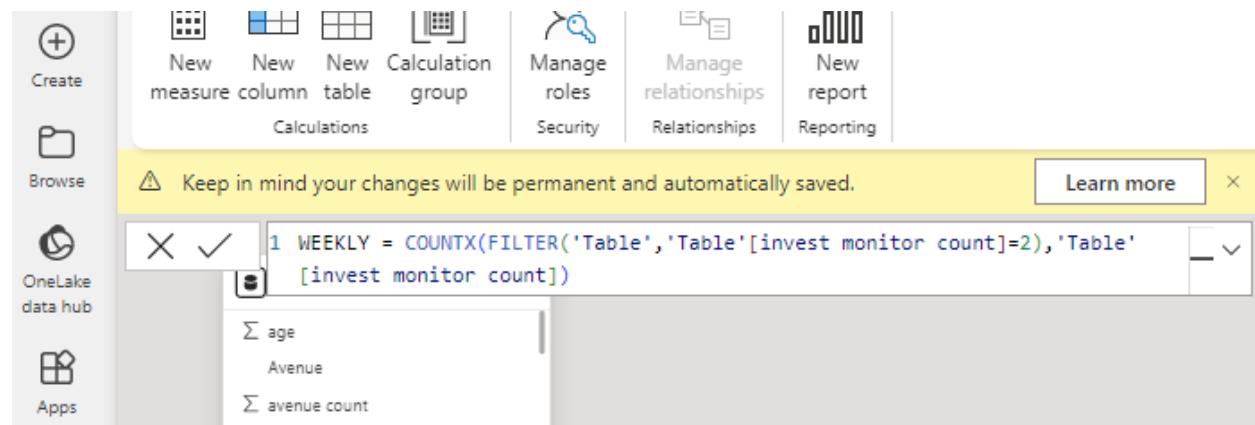


FIG-21

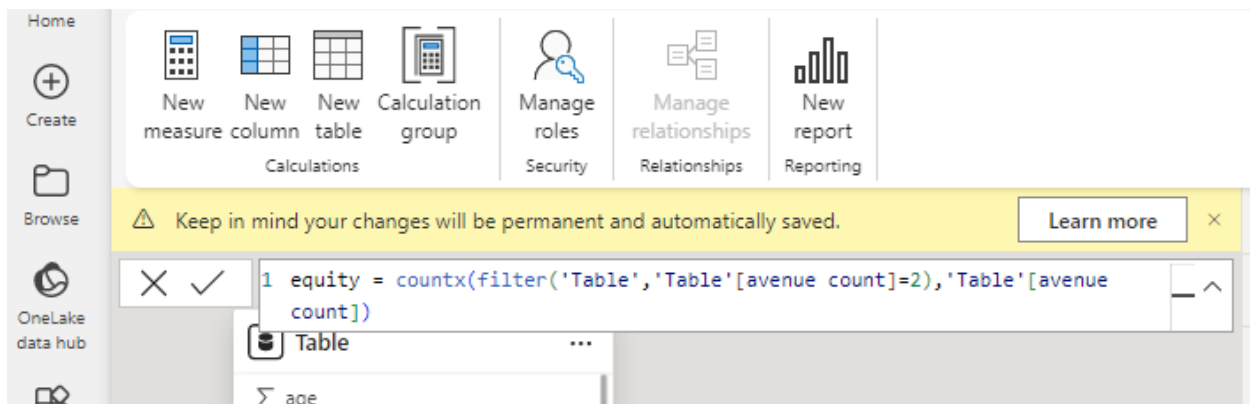


FIG-22

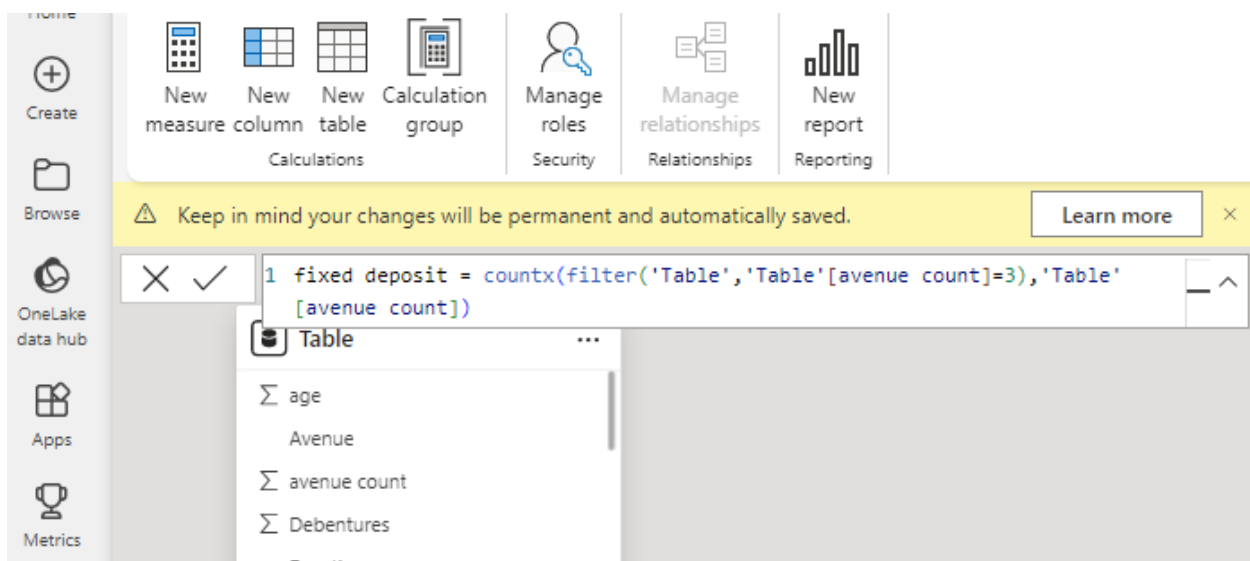


FIG-23

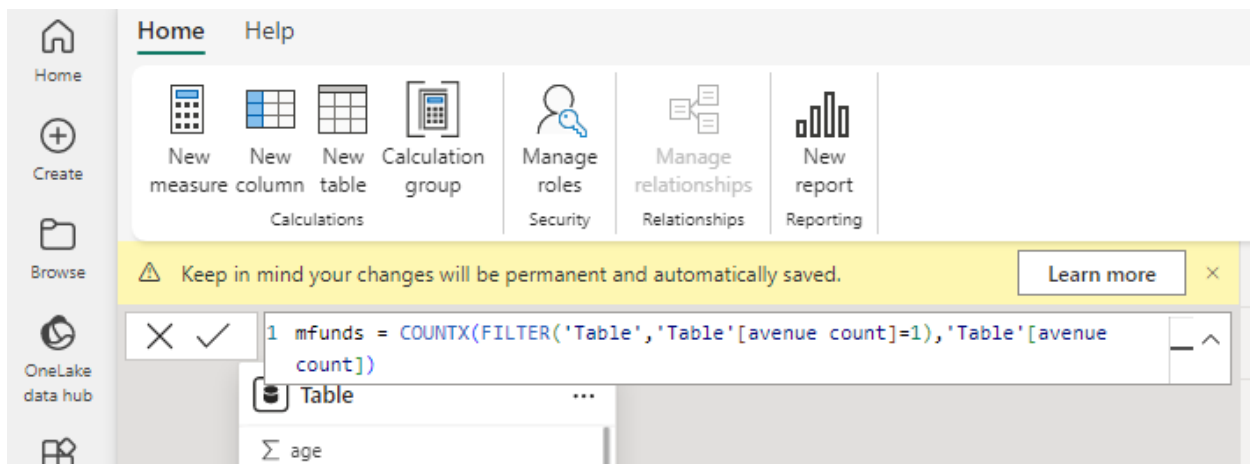


FIG-24

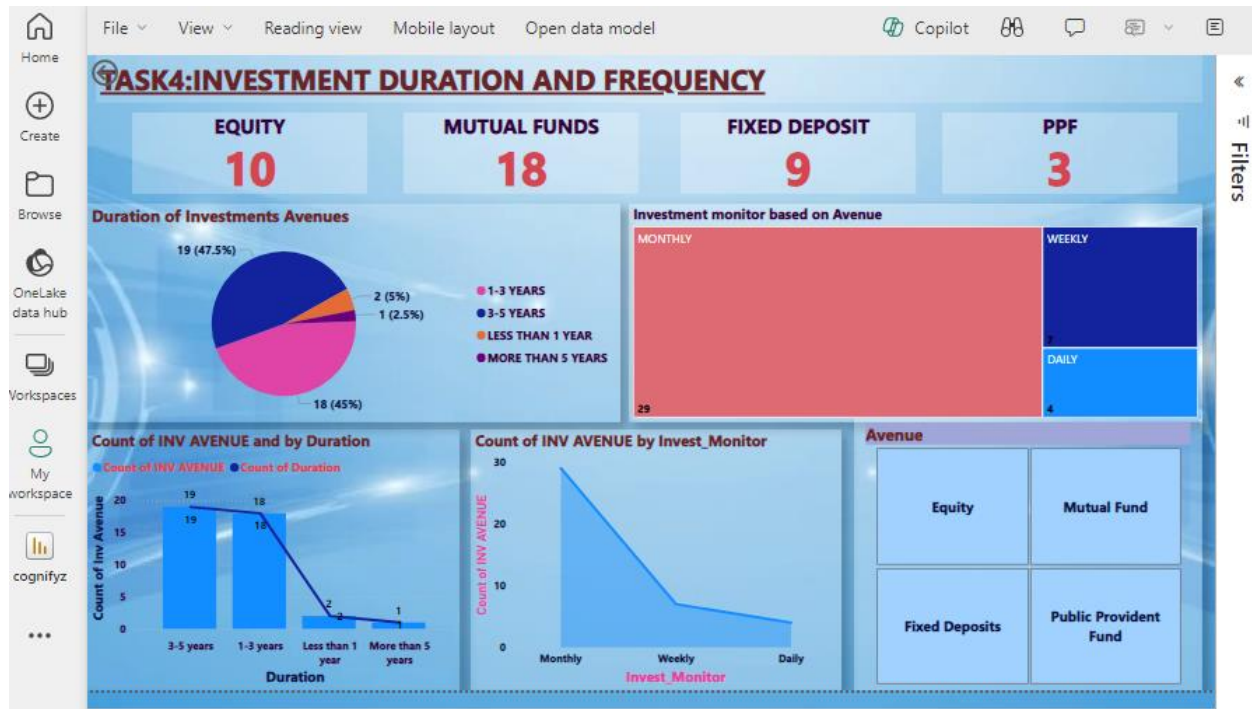


FIG-25

### Actions performed-

- FIG-16 to FIG-24, shows the calculation for counting the duration within years and investment monitor within daily, weekly and monthly
- The first four Cards shows the total number of investments occur in Equity, Mutual Funds, Fixed Deposit and PPF
- The pie chart depicts the duration of investment avenues that is divided into four parts and maximum investments are for 3-5 years(47.5%)
- Mostly people invest in a monthly basis
- The Area chart shows a downward trend between monthly, weekly and daily
- Hence this Dashboard shows the overall trend of duration between different investment avenues.

## TASK 5- REASONS FOR INVESTMENT

**Objective-** Analyze and visualize the reasons for investment

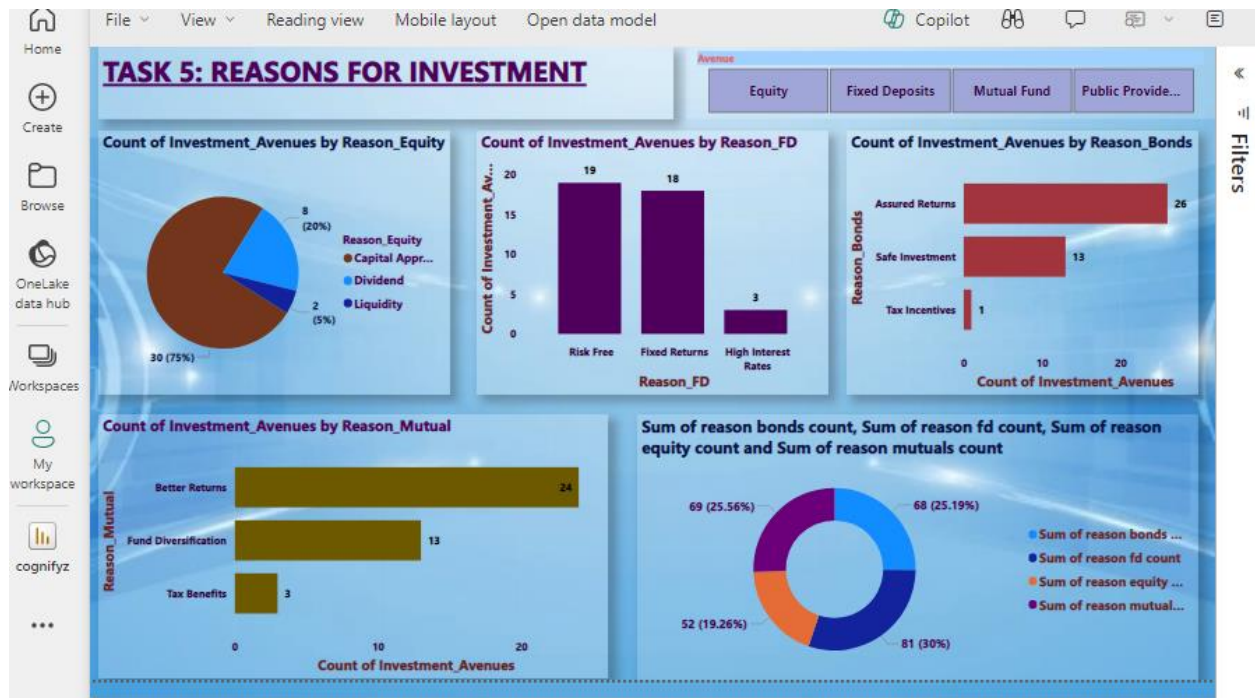


FIG-26



FIG-27

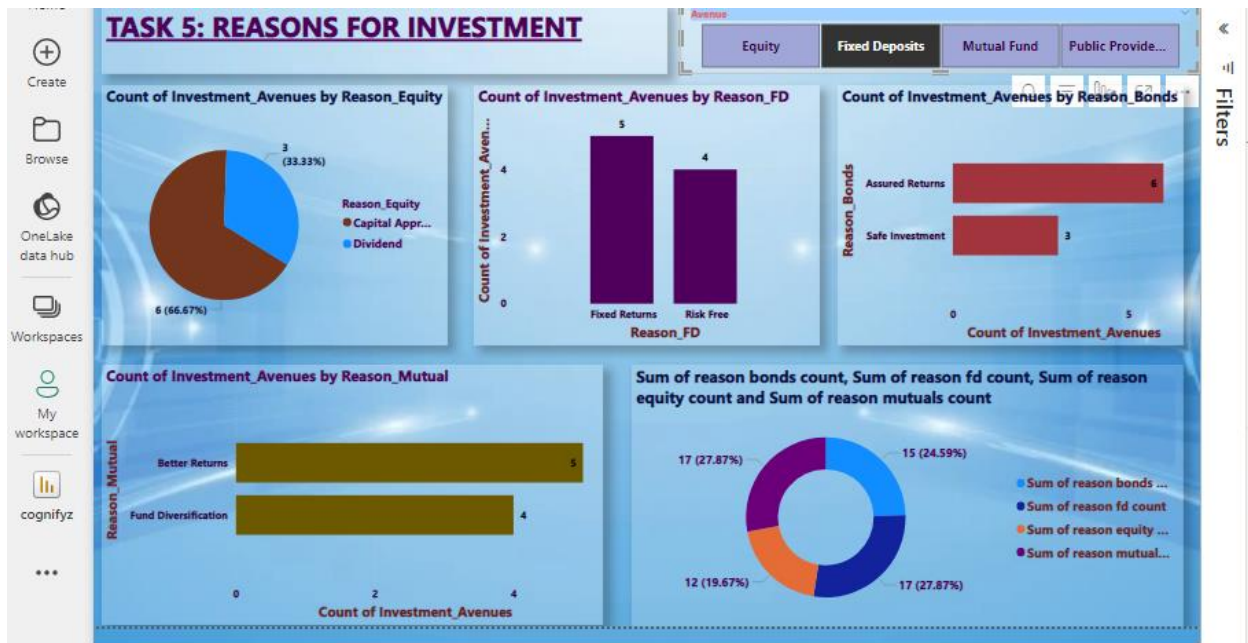


FIG-28

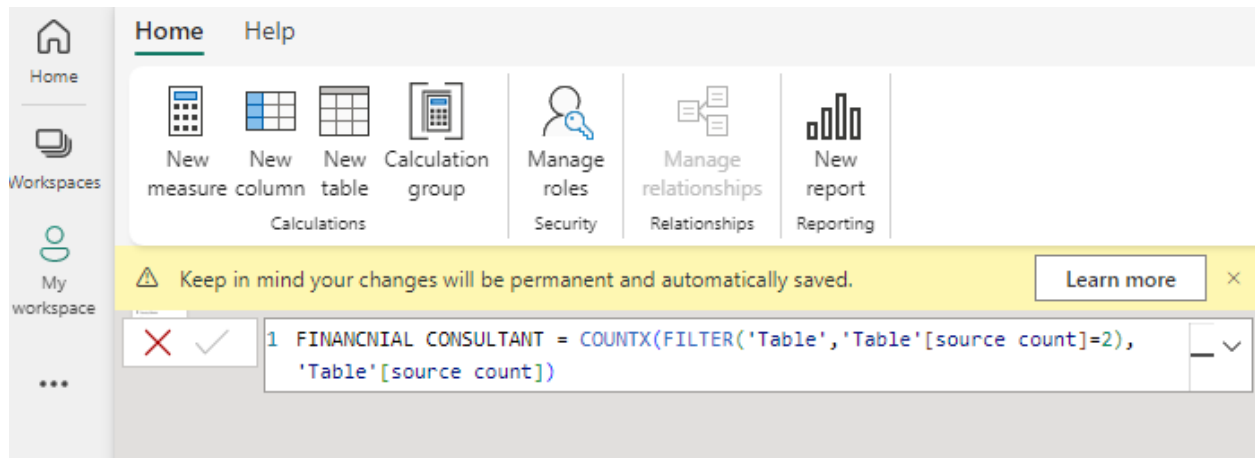
### Actions performed-

- This Dashboard represents overall analysis of various reasons for investments avenues, that keeps changing with different avenues with Slicer
- The pie chart depicts the reason of equity where capital appreciation is the highest which investor prefer and the values changes with different avenues
- The clustered column chart shows the reason of fixed deposits where the reason is highest as it is Risk Free
- The bar chart counts the reasons for government bonds where mostly people favour the reason of assured returns
- Another bar chart shows the reasons of mutual bonds where investors prefer it because of Better Returns(24)
- The last doughnut chart forecasts the overall count of reasons for various avenues where the highest is in fixed deposit

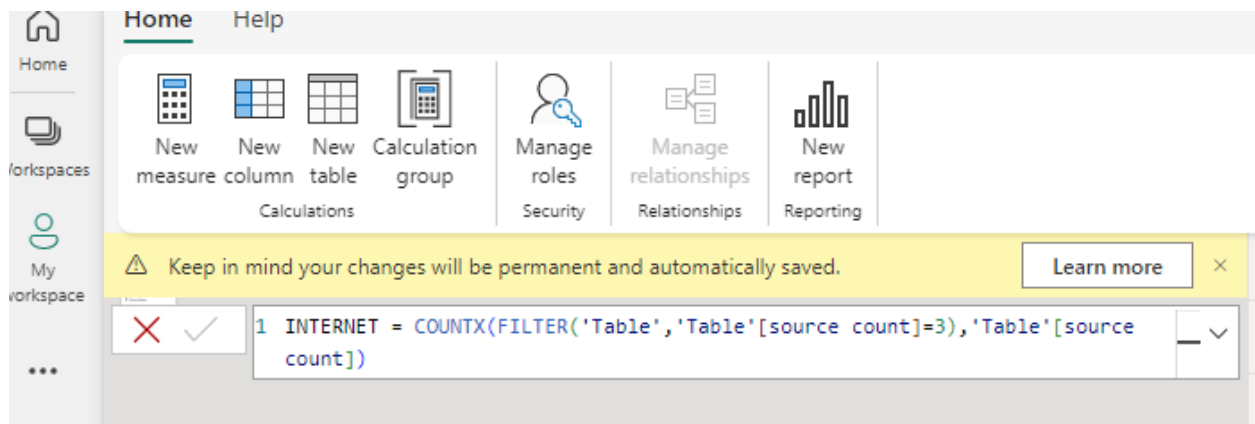


## **TASK 6- SOURCE OF INFORMATION**

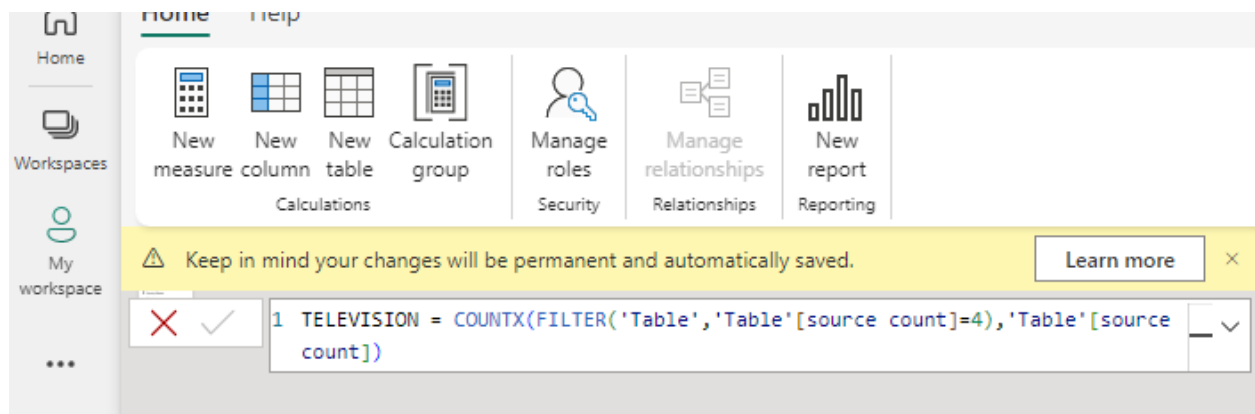
**Objective-** analyze the sources from which individuals gather investment information



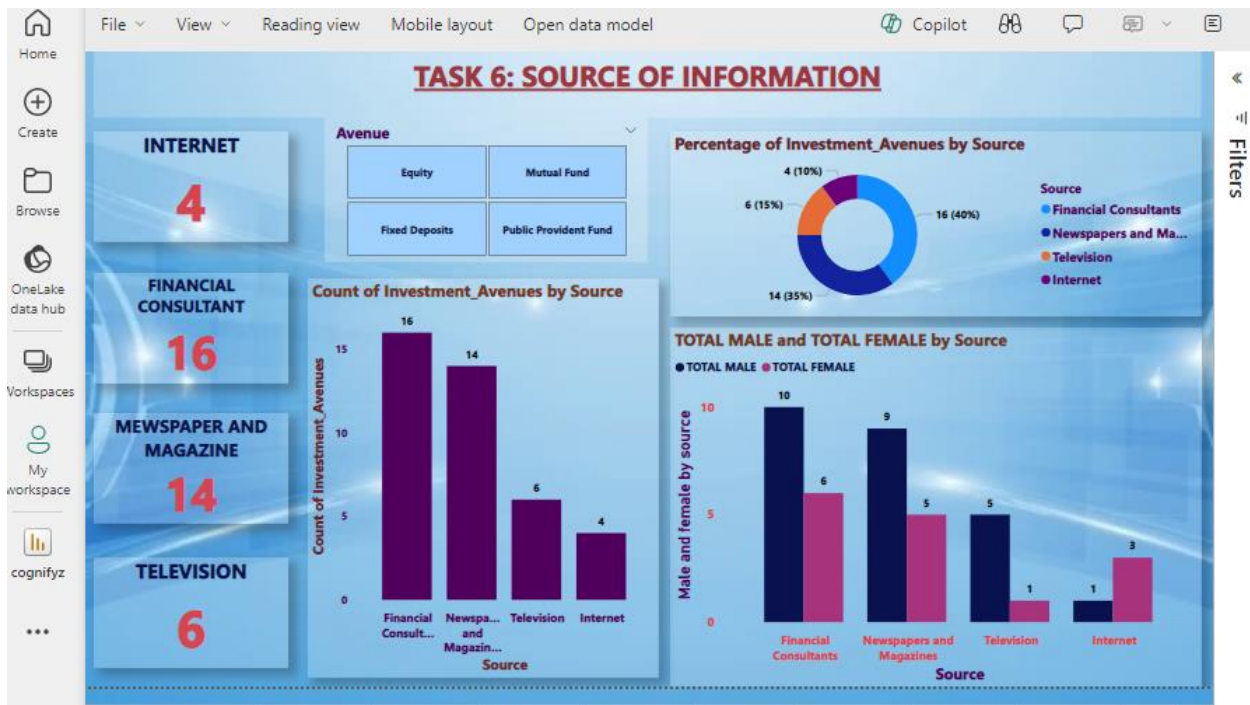
**FIG-29**



**FIG-30**



**FIG-31**



**FIG-32**

### **Actions performed-**

- This Dashboard mainly focuses on the various sources of information for investments like newspapers, internet, television, financial consultants.
- The first four Card represents the total number of investors for choosing internet is 4, for financial consultants is 16, for newspapers and magazines is 14 and for television is 6 respectively.
- The Slicer shows the avenues for changing values
- The Doughnut chart represents that the percentage of investors to get the information from financial consultants (40%) and least from internet (10%)
- The clustered column chart shows the maximum and minimum number of investors that is 16 in financial consultant and 4 in internet.
- The other chart represents the source of information based on gender where male is the highest in financial consultants

## TASK 7- COMBINE INSIGHTS INTO A DASHBOARD

**Objective-** Create a comprehensive dashboard incorporating all insights

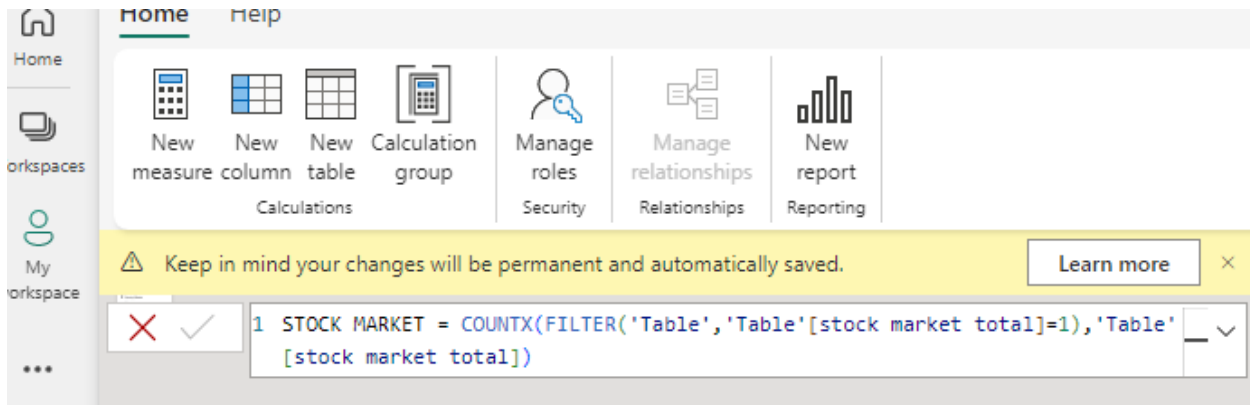


FIG-33



FIG-34



FIG-35

### Actions performed-

- This Dashboard forecasts the overall analysis of investment avenues with relation to duration, investment, monitor, source of information, based on gender etc.
- This depicts the overall relation with different factors from the previous tasks
- The Card shows the investment avenue, total male and total female and how many invest in stock market
- The Slicer shows avenue, gender and the purpose for the investment

**Conclusion-** The overall analysis of the investment avenues incorporated in a single insight in Task 7.