

# **UBER EXPEDITIONARY ANALYSIS**



***Project submitted by:***

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## **INTRODUCTION:**

Uber is a transportation company with an app that allows passengers to hail a ride and drivers to charge fares and get paid.

Uber is a multinational transportation network company that operates a ride-hailing platform. Uber offers various ride options, including the ability to request a luxury car, split fare with another rider, or travel in a specific assistance vehicle.

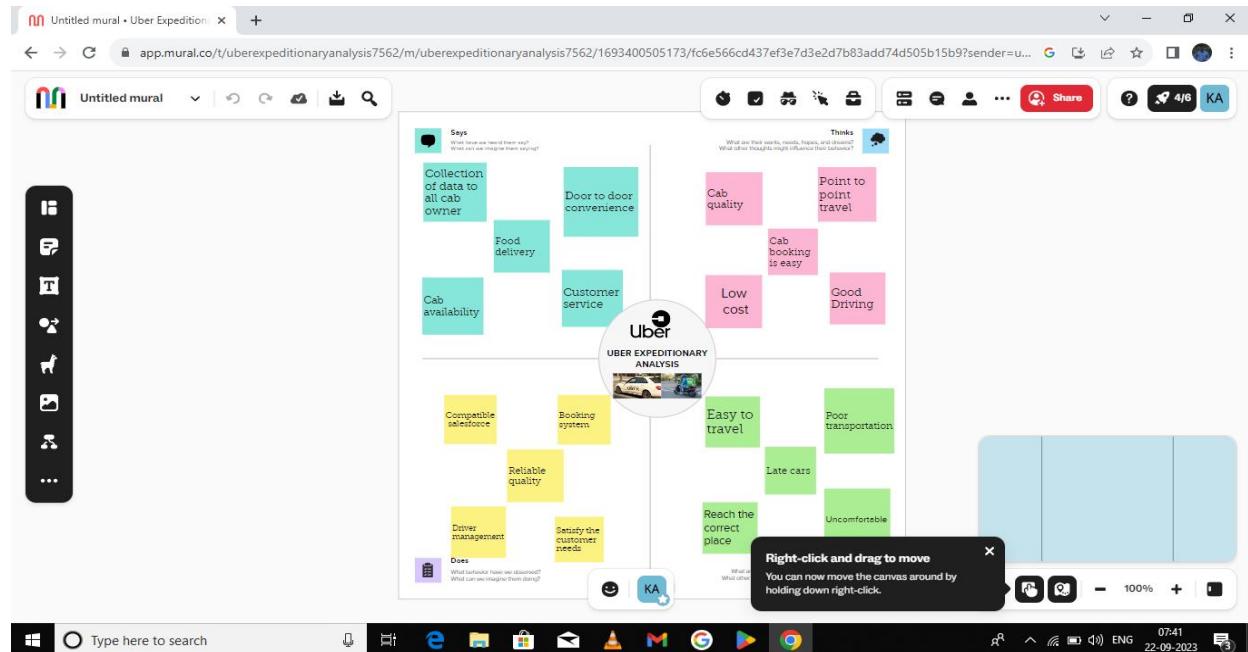
Uber provides a convenient way for individuals to request rides from drivers who use their own personal vehicles.

Uber Driver Analysis refers to the analyzing the number of trips taken by Uber drivers can provide insights into their overall activity and the demand for rides in specific areas.

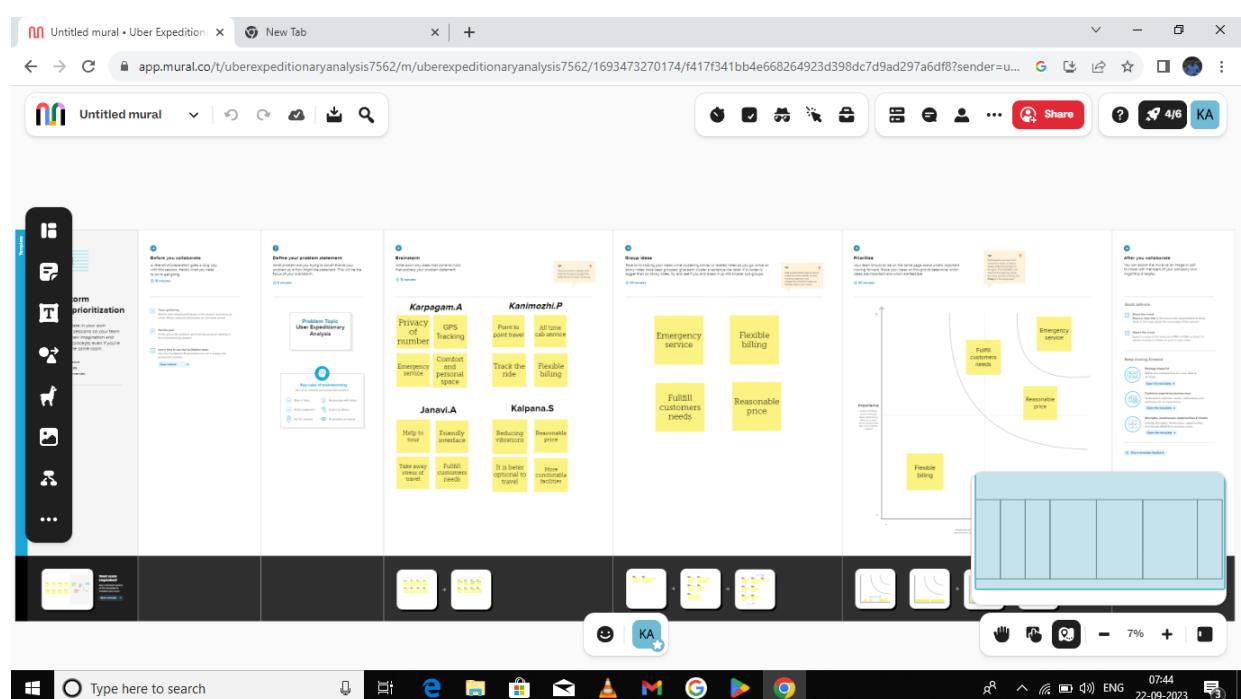
# MILESTONE 1: Define Problem / Problem Understanding

- Specify the business problem
- Business requirements
- Literature Survey

## Empathy Map



## Brainstorming Map



## MILESTONE 2: Data Collection

### Activity 1: Collect the dataset

#### Downloading the dataset

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	START_DATE*	END_DATE*	CATEGORY	START*	STOP*	MILES*	PURPOSE*											
2	01-01-2016 21:11	01-01-2016 21:17	Business	Fort Pierce	Fort Pierce	5.1	Meal/Entertain											
3	01-02-2016 01:25	01-02-2016 01:37	Business	Fort Pierce	Fort Pierce	5												
4	01-02-2016 20:25	01-02-2016 20:38	Business	Fort Pierce	Fort Pierce	4.8	Errand/Supplies											
5	01-05-2016 17:31	01-05-2016 17:45	Business	Fort Pierce	Fort Pierce	4.7	Meeting											
6	01-06-2016 14:42	01-06-2016 15:49	Business	Fort Pierce	West Palm	63.7	Customer Visit											
7	01-06-2016 17:15	01-06-2016 17:19	Business	West Palm	West Palm	4.3	Meal/Entertain											
8	01-06-2016 17:30	01-06-2016 17:35	Business	West Palm	Palm Beach	7.1	Meeting											
9	01-07-2016 13:27	01-07-2016 13:33	Business	Cary	Cary	0.8	Meeting											
10	01-10-2016 08:05	01-10-2016 08:25	Business	Cary	Morrisville	8.3	Meeting											
11	01-10-2016 12:17	01-10-2016 12:44	Business	Jamaica	New York	16.5	Customer Visit											
12	01-10-2016 15:05	01-10-2016 15:51	Business	New York	Queens	10.8	Meeting											
13	01-10-2016 18:18	01-10-2016 18:53	Business	Elmhurst	New York	7.5	Meeting											
14	01-10-2016 19:12	01-10-2016 19:32	Business	Midtown	East Harlen	6.2	Meeting											
15	01-11-2016 08:55	01-11-2016 09:21	Business	East Harlen	NoMad	6.4	Temporary Site											
16	01-11-2016 11:56	01-11-2016 12:03	Business	Flatiron Dis	Midtown	1.6	Errand/Supplies											
17	01-11-2016 13:32	01-11-2016 13:43	Business	Midtown	Midtown E	1.7	Meal/Entertain											
18	01-11-2016 14:30	01-11-2016 14:43	Business	Midtown E	Midtown	1.9	Meal/Entertain											
19	01-12-2016 12:33	01-12-2016 12:49	Business	Midtown	Hudson Sq	1.9	Meal/Entertain											
20	01-12-2016 12:53	01-12-2016 13:09	Business	Hudson Sq	Lower Man	4	Meal/Entertain											
21	01-12-2016 14:42	01-12-2016 14:56	Business	Lower Man	Hudson Sq	1.8	Errand/Supplies											

#### Activity 1.1: Understand the data

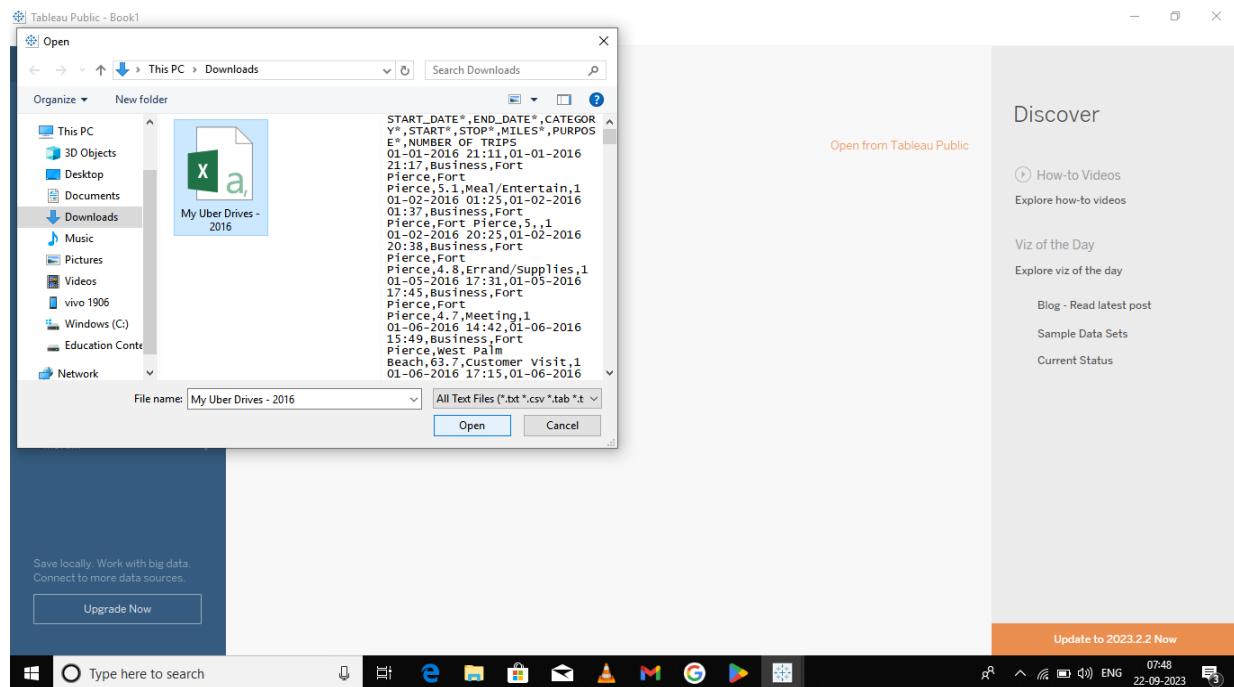
Data consists of 1157 rows and 7 columns that correspond to different values.

#### Column Description for Uber Drives-2016:

- START DATE: 2 January 2016 – 1 January 2017.
- END DATE: 2 January 2016 – 1 January 2017.
- START: Cary, New York, Durham, Downtown, Midtown, Midtown East, Houston, Gulfton, Whitebridge, Houston, Morrisville and 798 Others.
- STOP: Cary, New York, Durham, Downtown, Midtown, Midtown East, Houston, Gulfton, Whitebridge, Houston, Morrisville and 798 Others.
- MILES COVERED: 0.5-1220.92

- PURPOSE: Meeting, Temporary Site, Customer Visit, Meal/Entertain, Errand/Supplies, Airport, Between Offices, charity, commute, moving.

### Activity 3: Connect Dataset with Tableau



The screenshot shows the Tableau Public interface. A connection to the "My Uber Drives - 2016" dataset has been established. The data preview shows 1156 rows and 8 fields. The preview table includes columns such as Name, Start Date\*, End Date\*, Category\*, Start\*, Stop\*, and Stop\*. A tooltip labeled "Go to Worksheet" points to the worksheet tab at the bottom of the interface.

Name	Start Date*	End Date*	Category*	Start*	Stop*
01-01-2016 21:11:00	01-01-2016 21:17:00	Business	Fort Pierce	Fort Pierc	
02-01-2016 01:25:00	02-01-2016 01:37:00	Business	Fort Pierce	Fort Pierc	
02-01-2016 20:25:00	02-01-2016 20:38:00	Business	Fort Pierce	Fort Pierc	
05-01-2016 17:31:00	05-01-2016 17:45:00	Business	Fort Pierce	Fort Pierc	
06-01-2016 14:42:00	06-01-2016 15:49:00	Business	Fort Pierce	West Palm	

# MILESTONE 3: Data Preparation

## *Activity 1: Prepare the Data for Visualization*

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trend, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete. This process helps to make the data easily understandable and ready for creating visualizations to gain insights into our analysis.

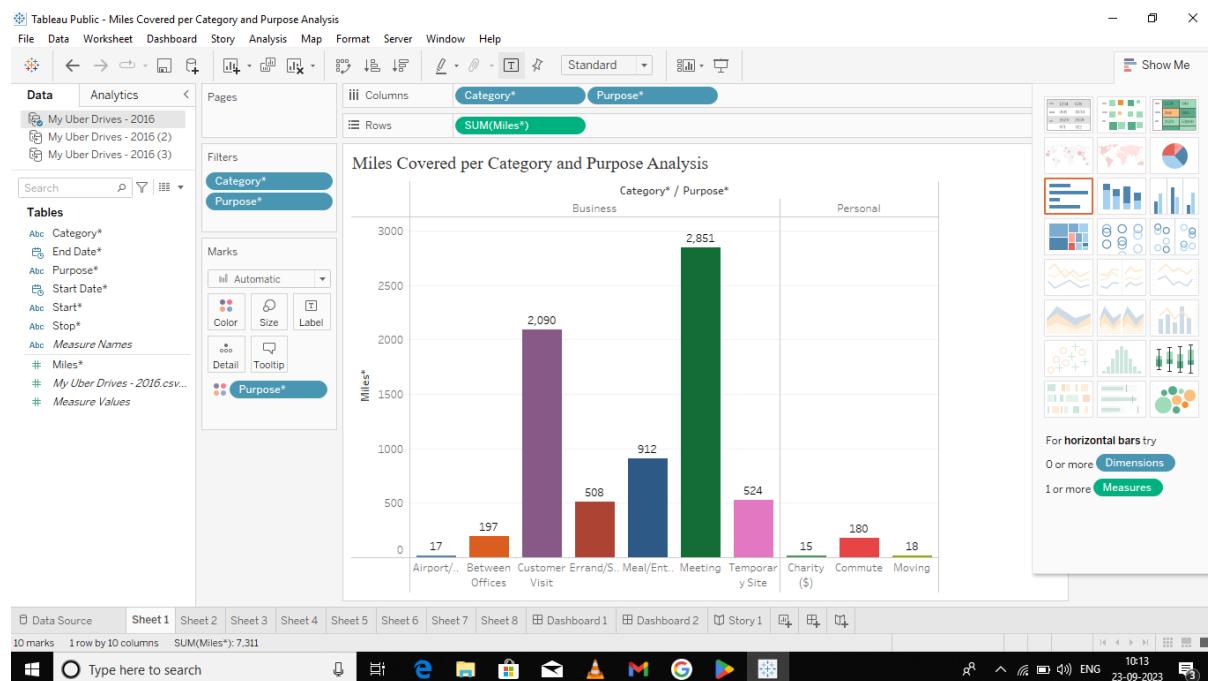
# MILESTONE 4: Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore information.

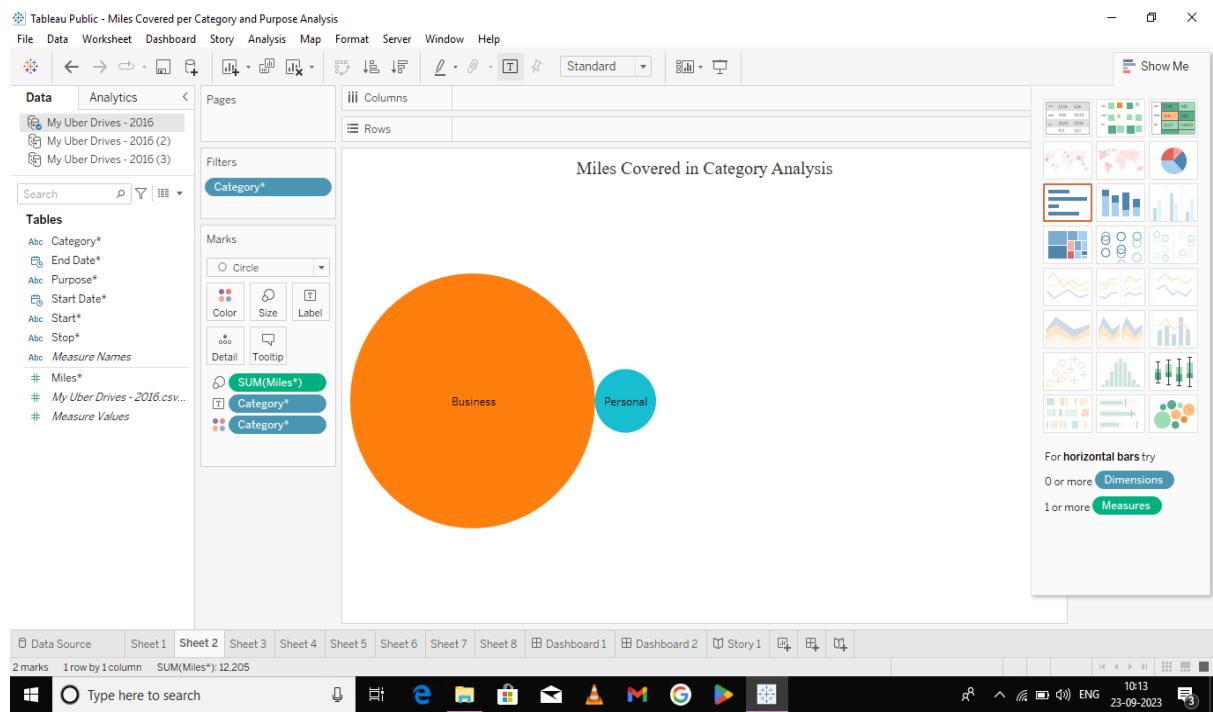
## *Activity 1: Number of Unique Visualizations*

The number of unique visualizations that can be created with a given dataset. These visualizations can be used to compare performance, track changes over time, show distribution, and relationships between variables.

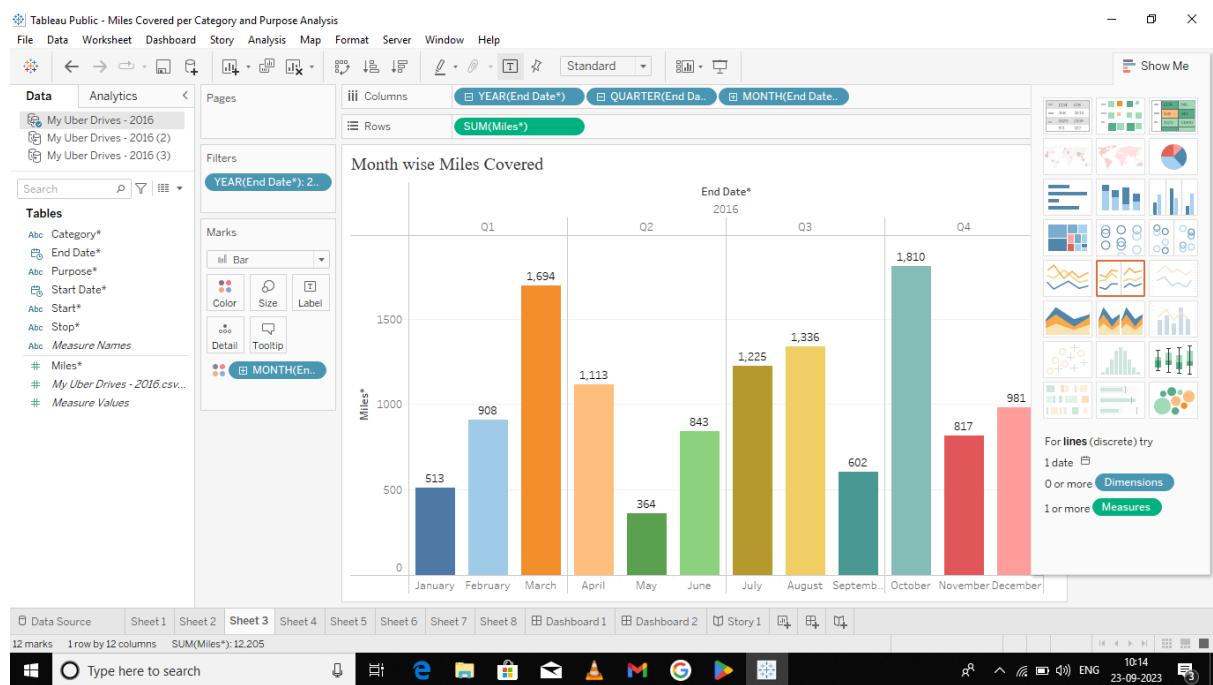
## *Activity 1.1: Miles Covered per Category and Purpose Analysis*



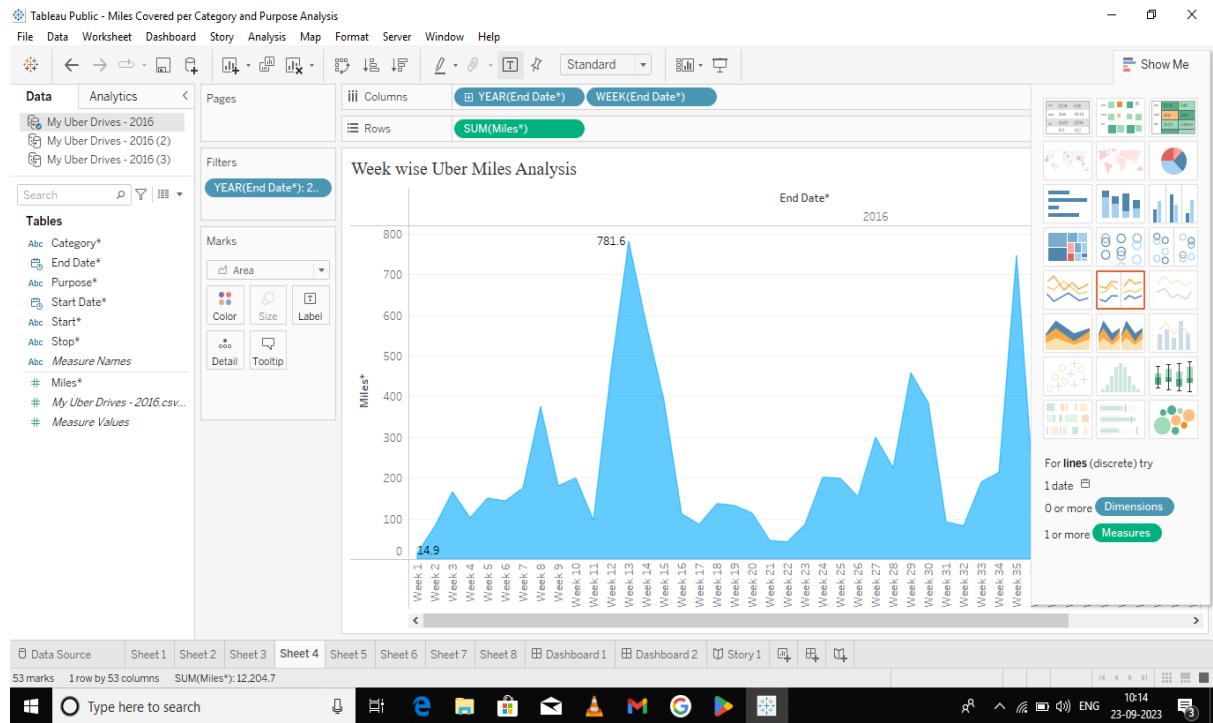
## Activity 1.2: Miles Covered in Category Analysis



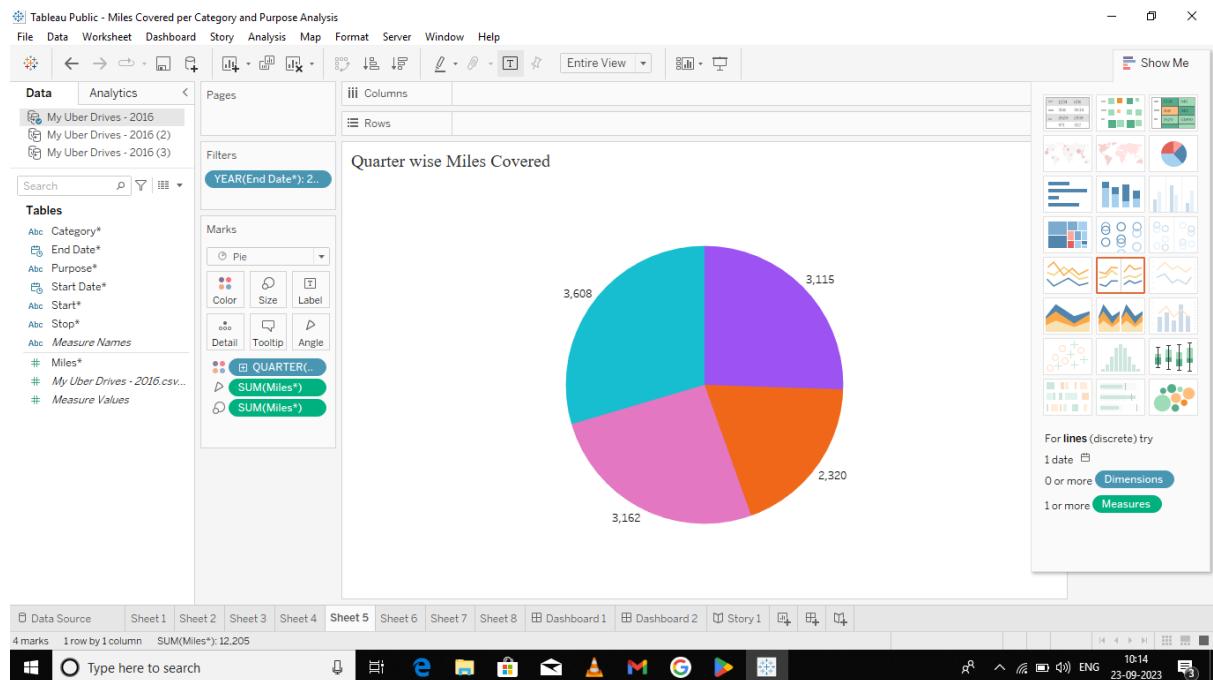
## Activity 1.3: Month wise Uber Miles Analysis



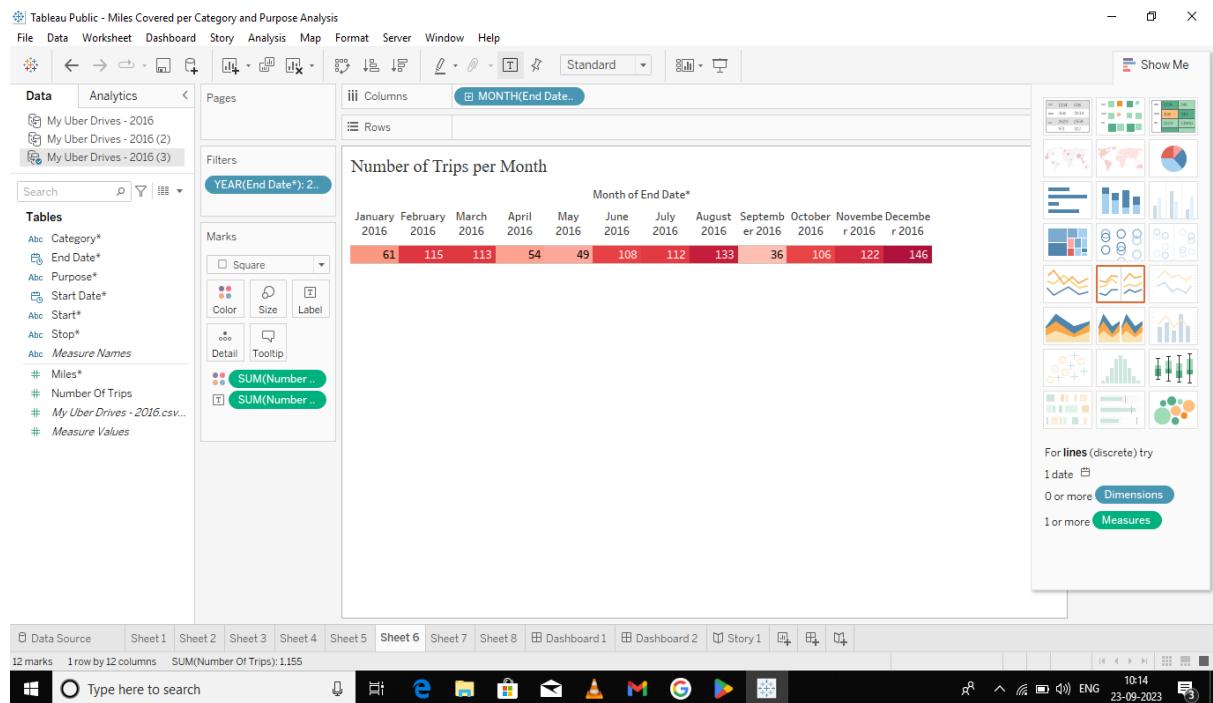
## Activity 1.4: Week wise Uber Miles Analysis



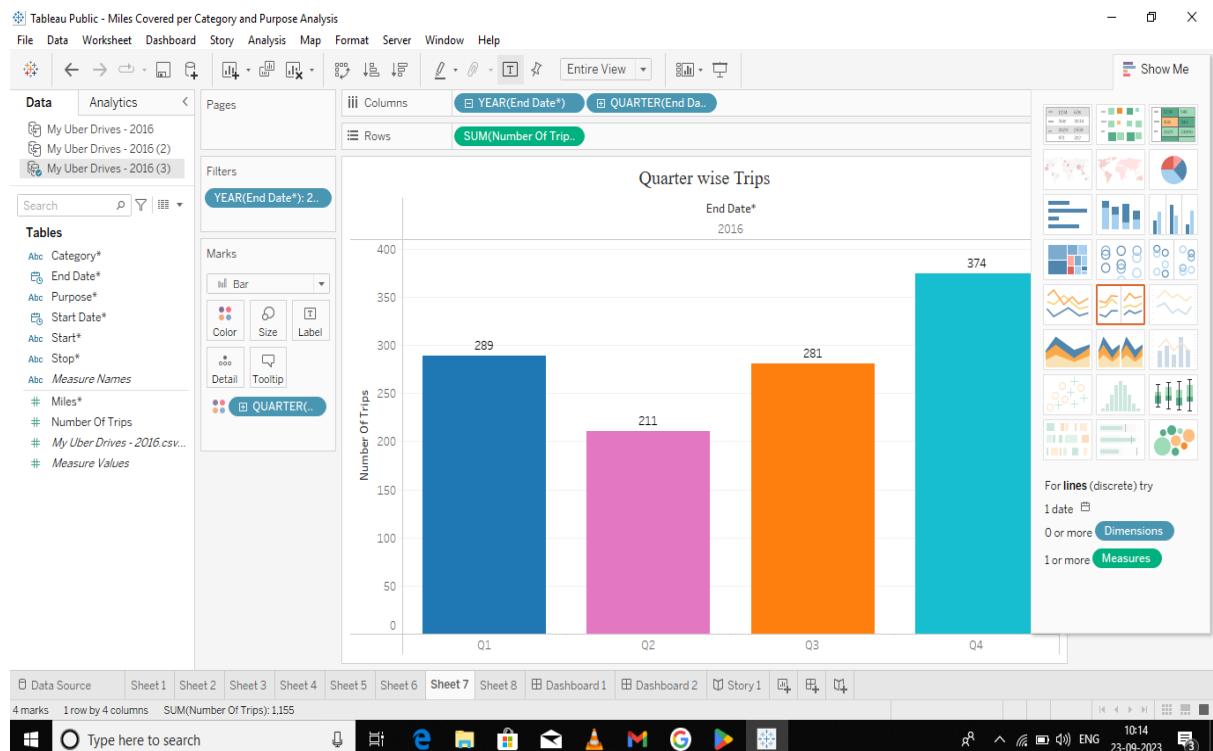
## Activity 1.5: Quarter wise Uber Miles Analysis



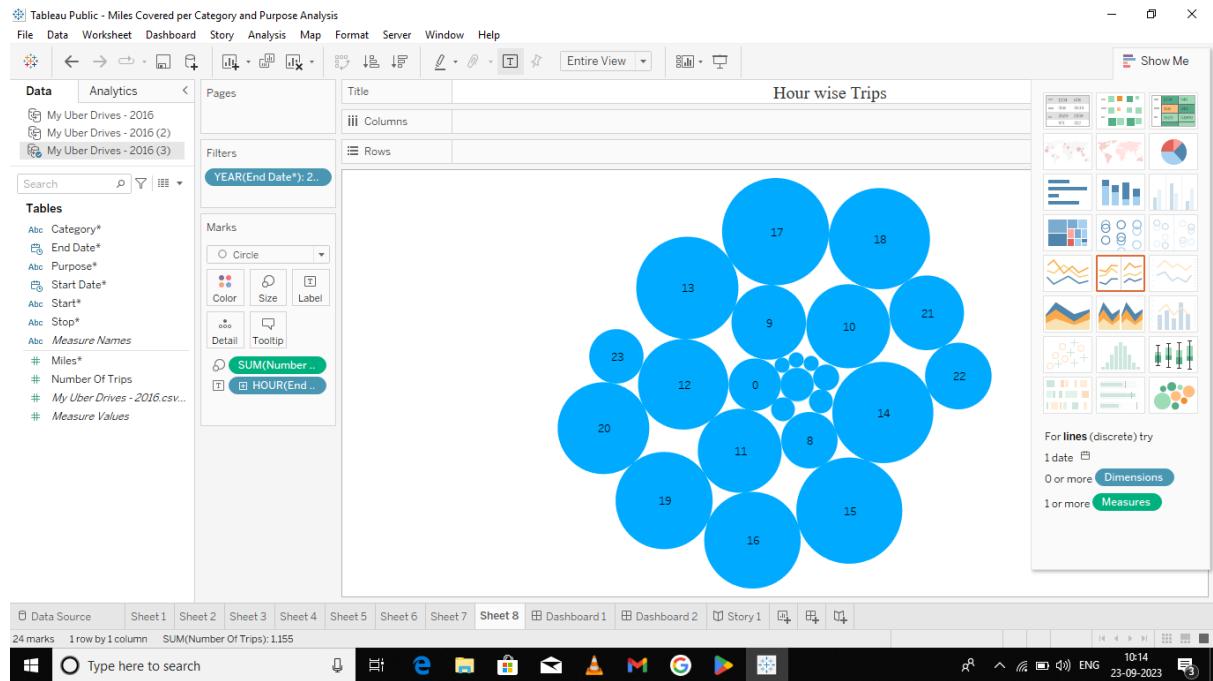
## Activity 1.6: Month wise Uber Trips Analysis



## Activity 1.7: Quarter wise Uber Trips Analysis



## Activity 1.8: Hour wise Uber Trips Analysis

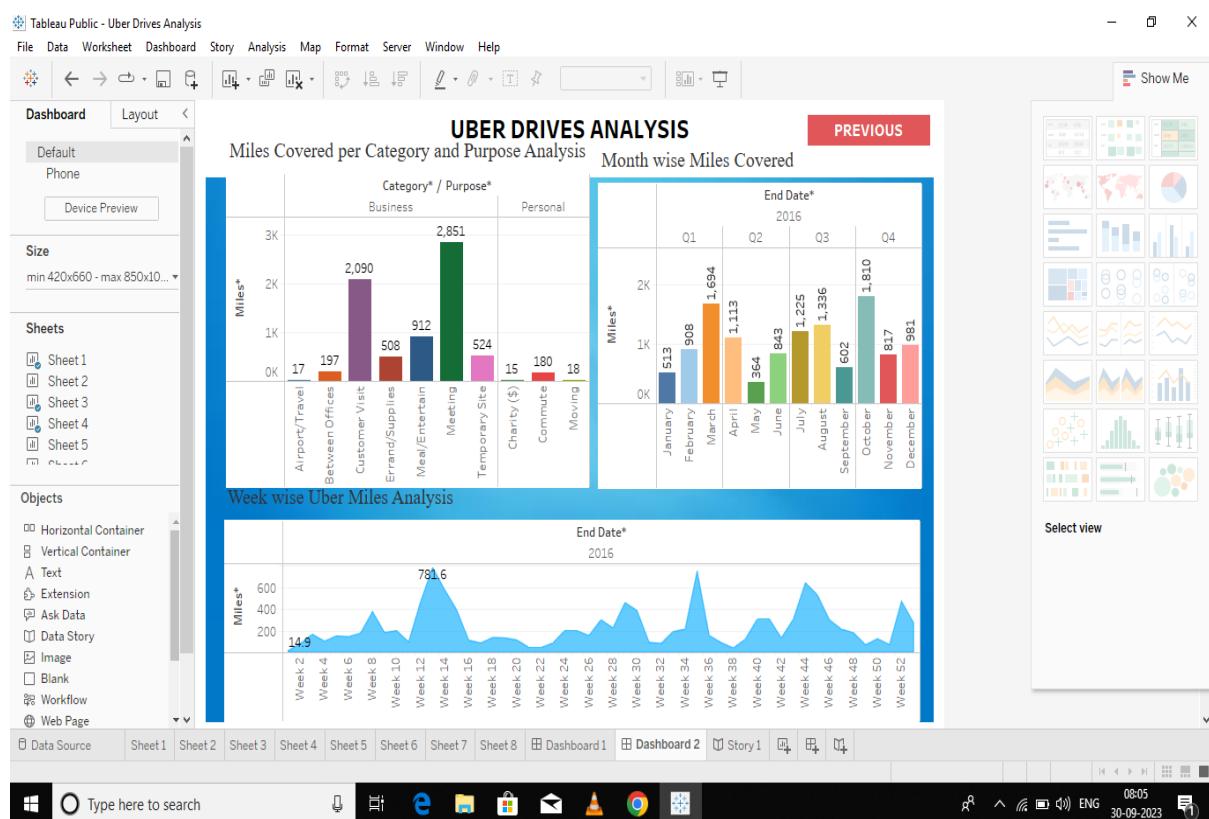
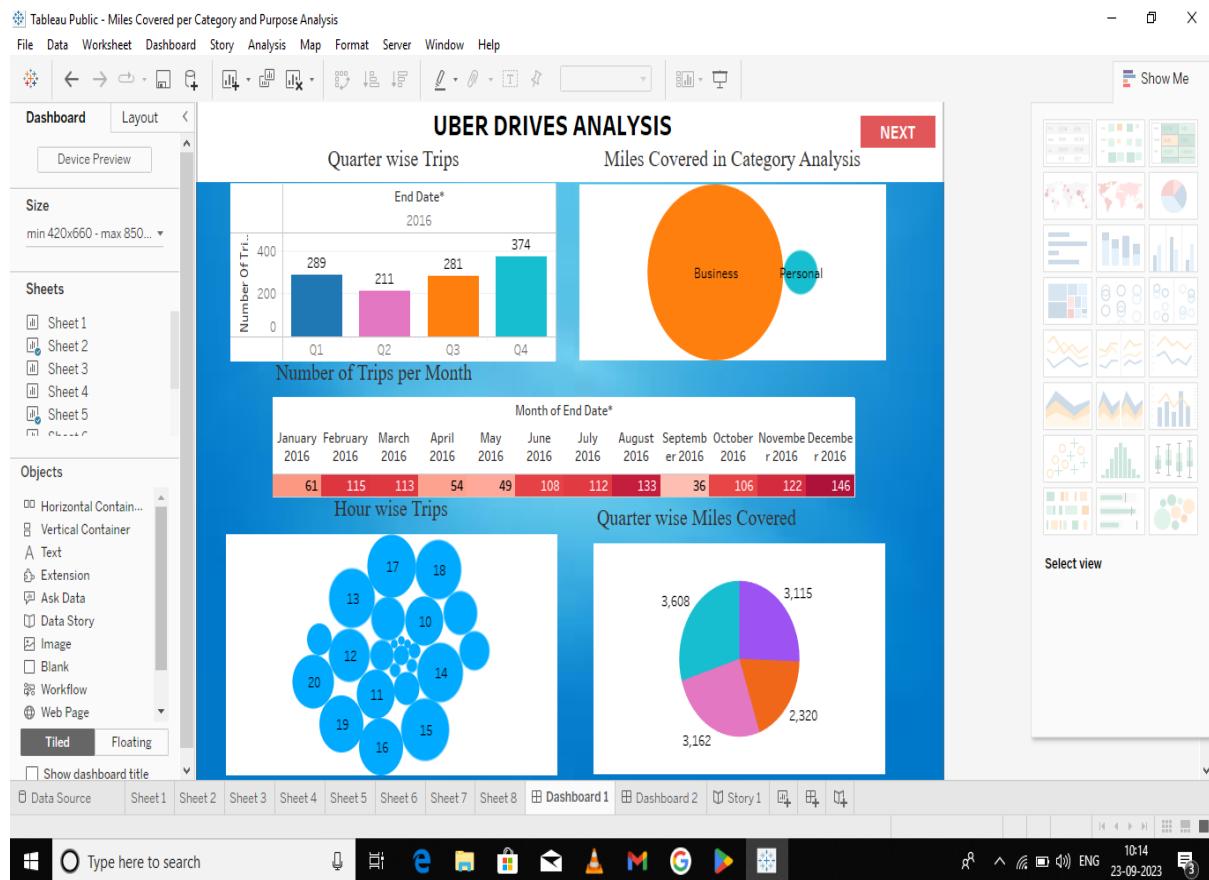


## MILESTONE 5: Dashboard

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

## Activity 1: Responsive and Design of Dashboard

The goal is to create a dashboard that is user-friendly, interactive, and data-driven, providing actionable insights.

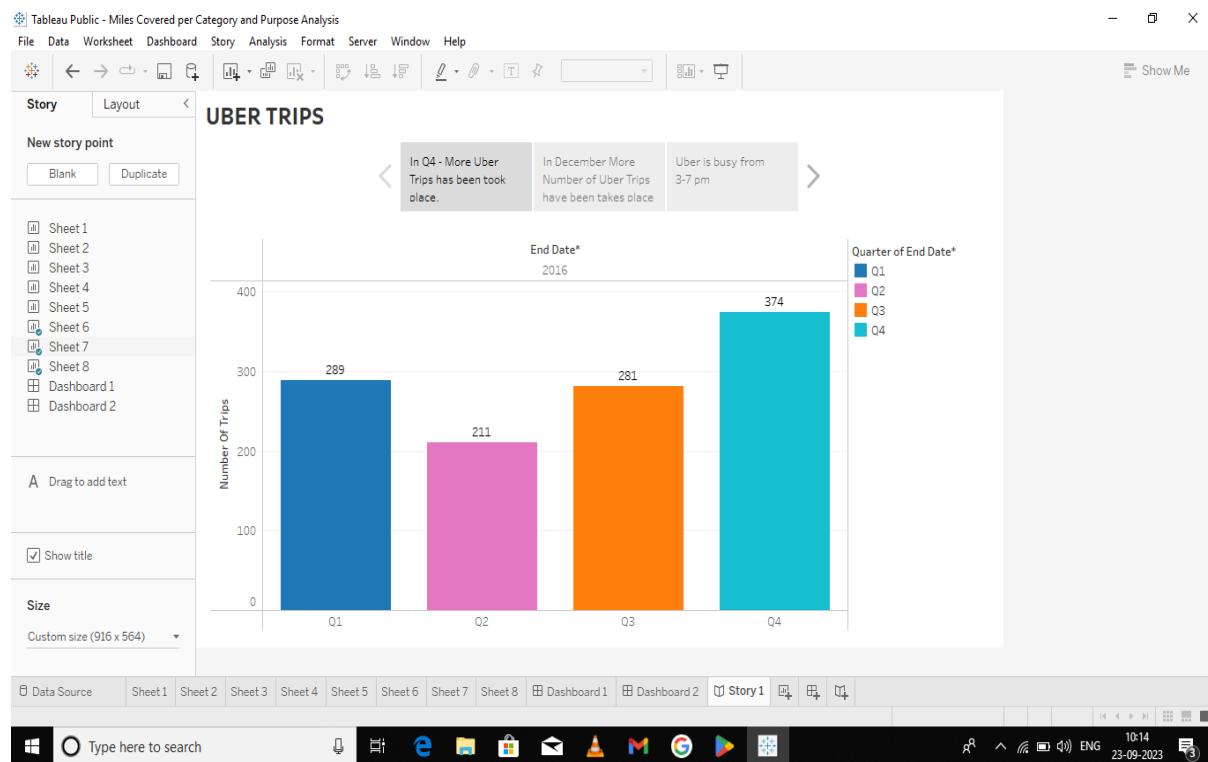


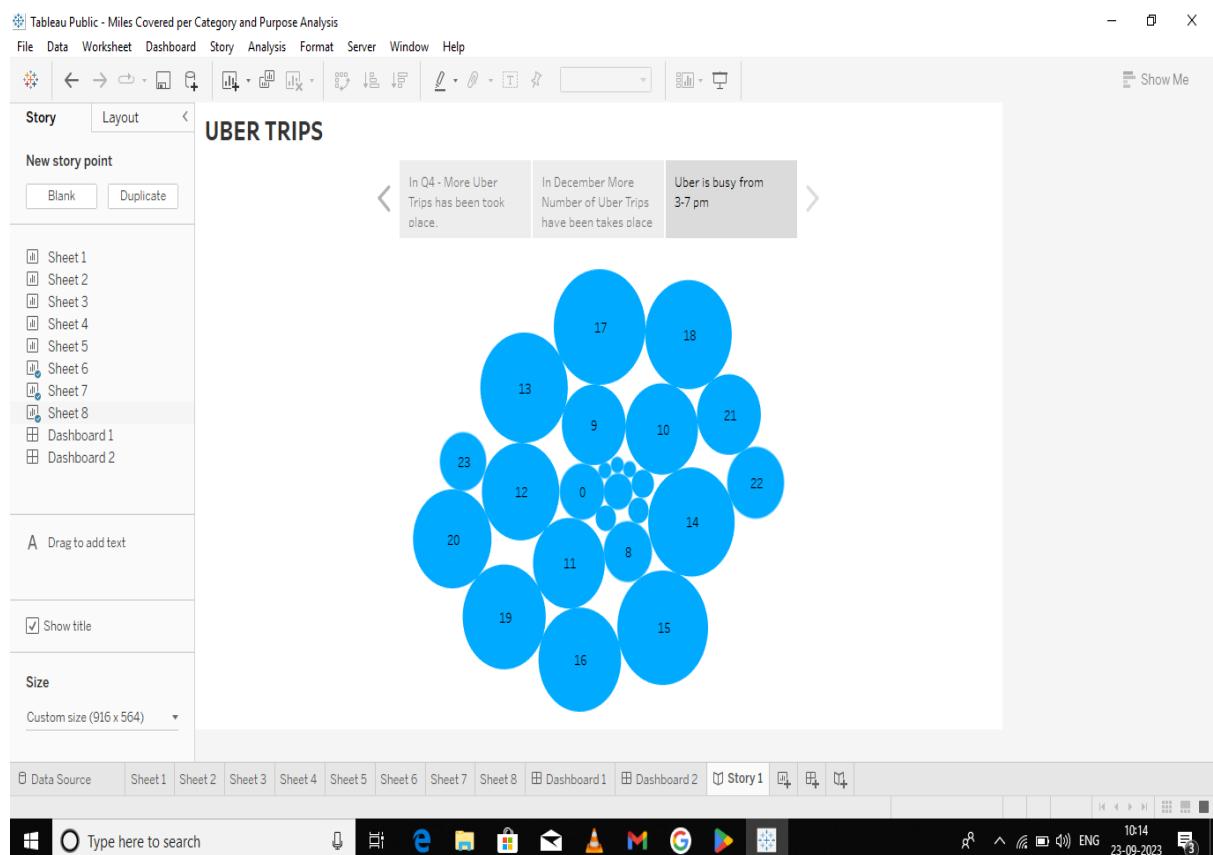
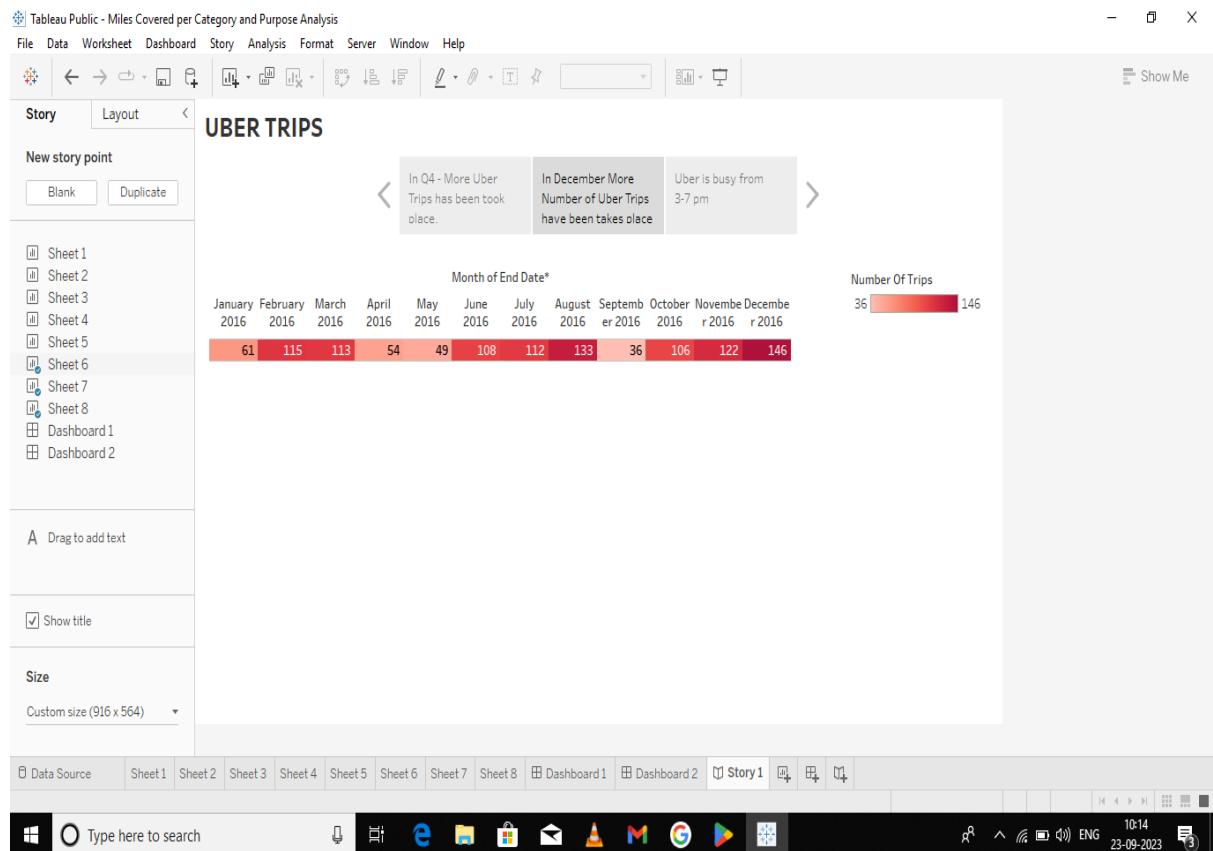
## MILESTONE 6: Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand.

### *Activity 1: Number of Scenes of Story*

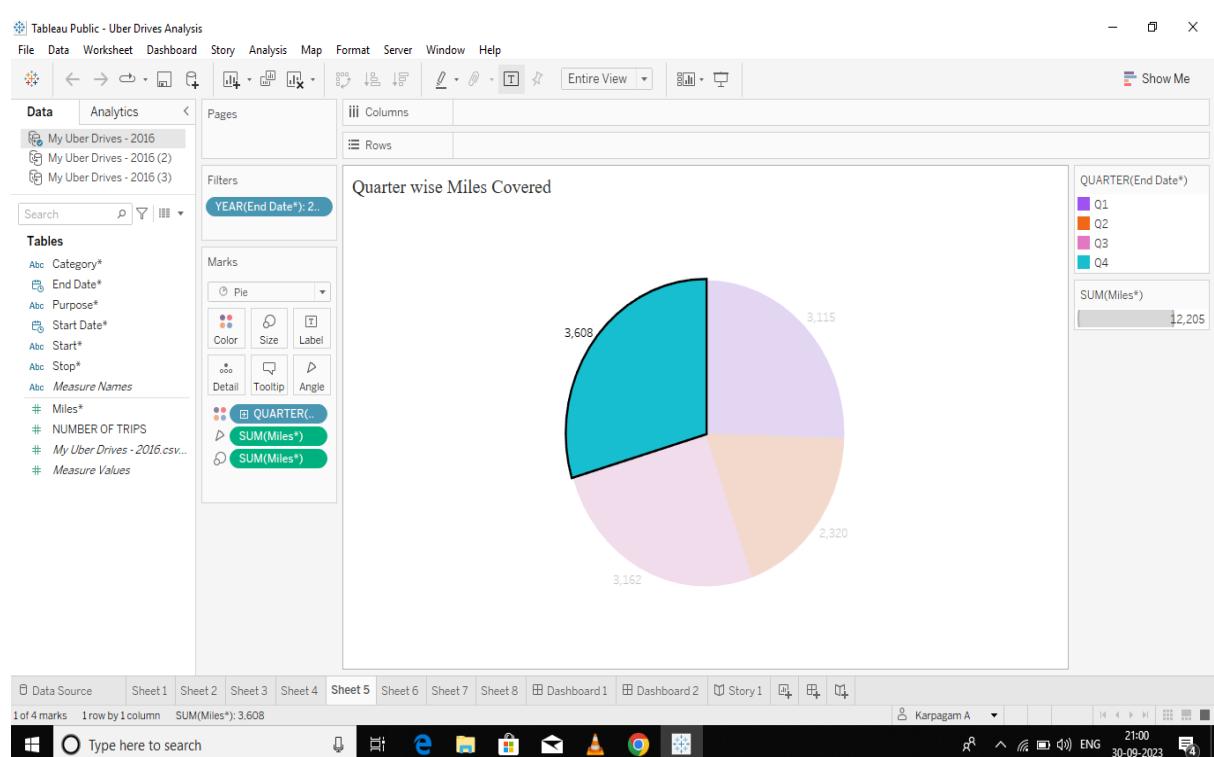
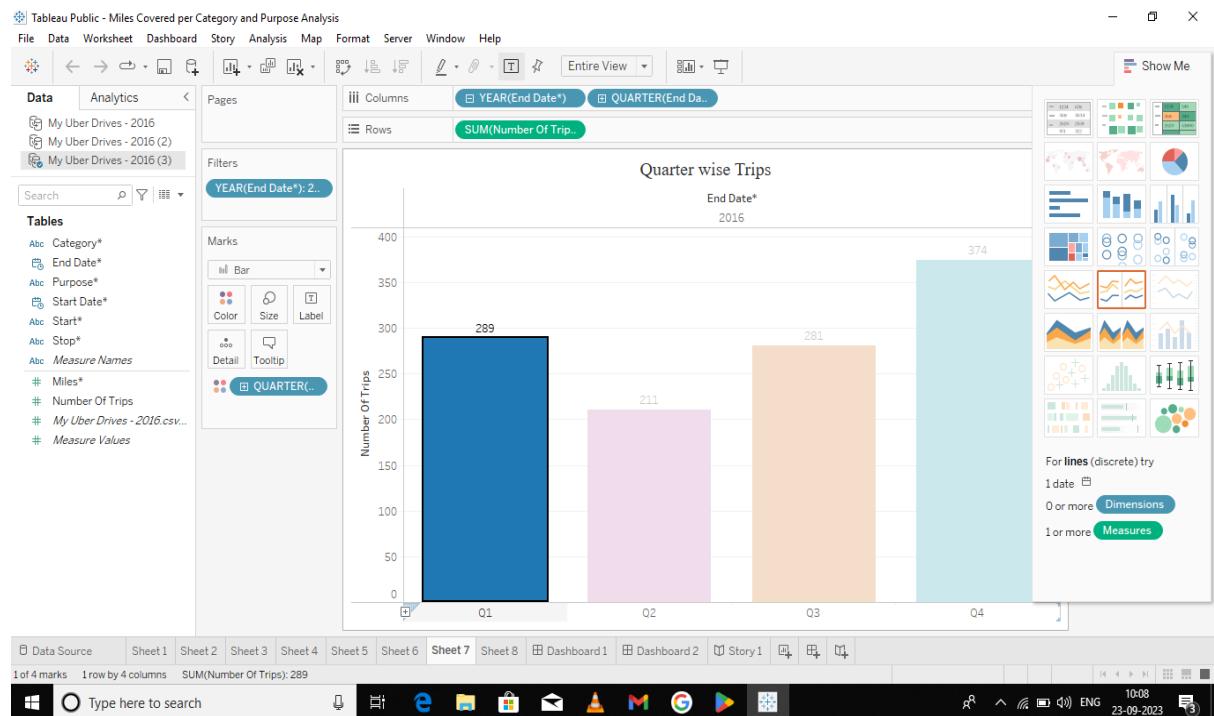
A storyboard is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes.

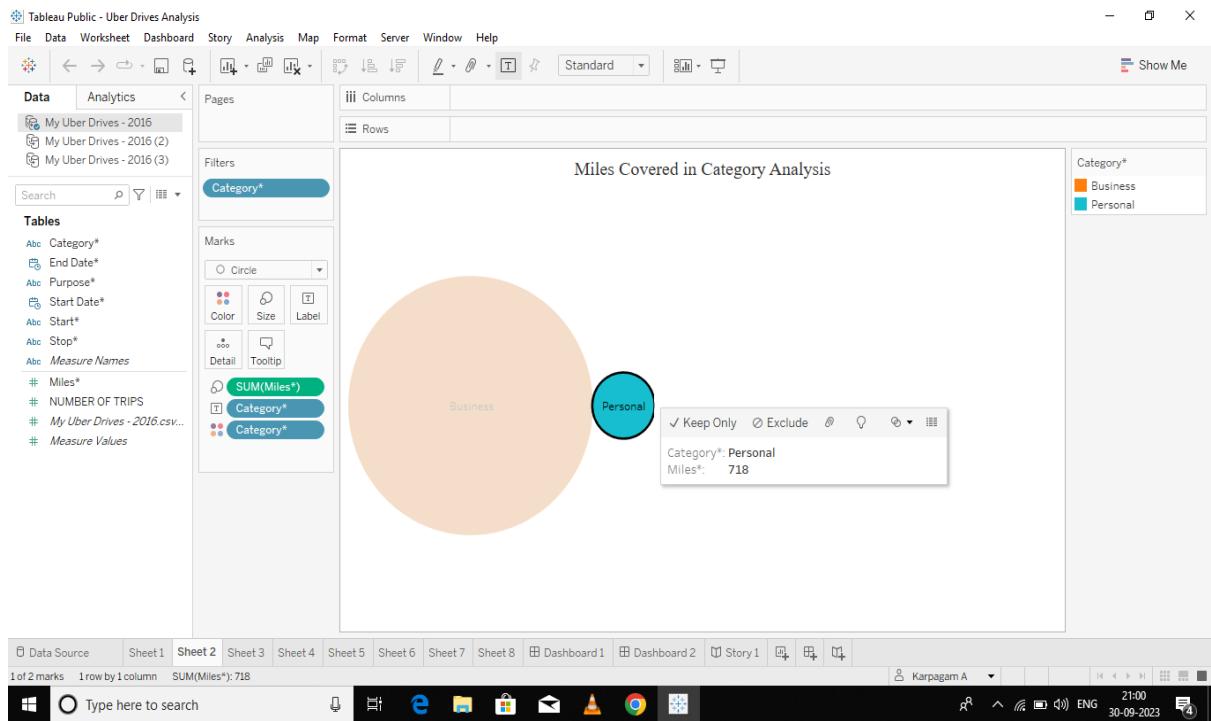




# MILESTONE 7: Performance Testing

## Activity 1: Utilization of Filters





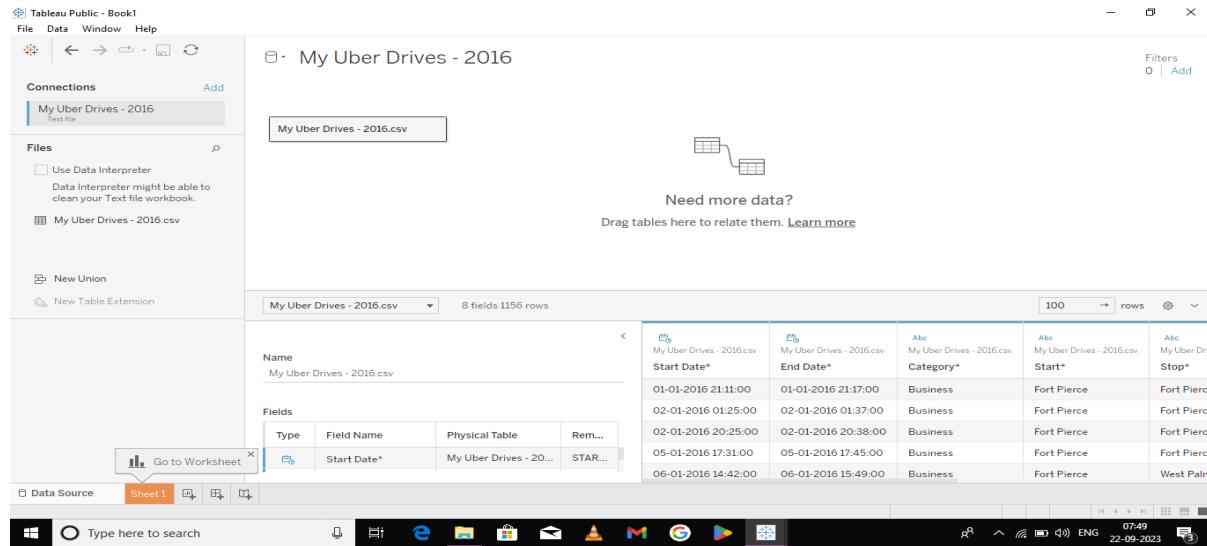
## *Activity 2: Number of Visualizations/Graphs*

- 1.** Bar graph showing Purpose of Uber with Miles covered.
- 2.** Bubble chart showing distribution of Miles with Category.
- 3.** Bar graph showing Quarter with Number of Trips.
- 4.** Highlight Table shows Month wise Number of Trips.
- 5.** Bar graph showing Month with Miles.
- 6.** Area Chart showing Week with Miles.
- 7.** Pie chart showing Quarter with Miles.
- 8.** Bubble Chart showing Hour with Number of Trips.

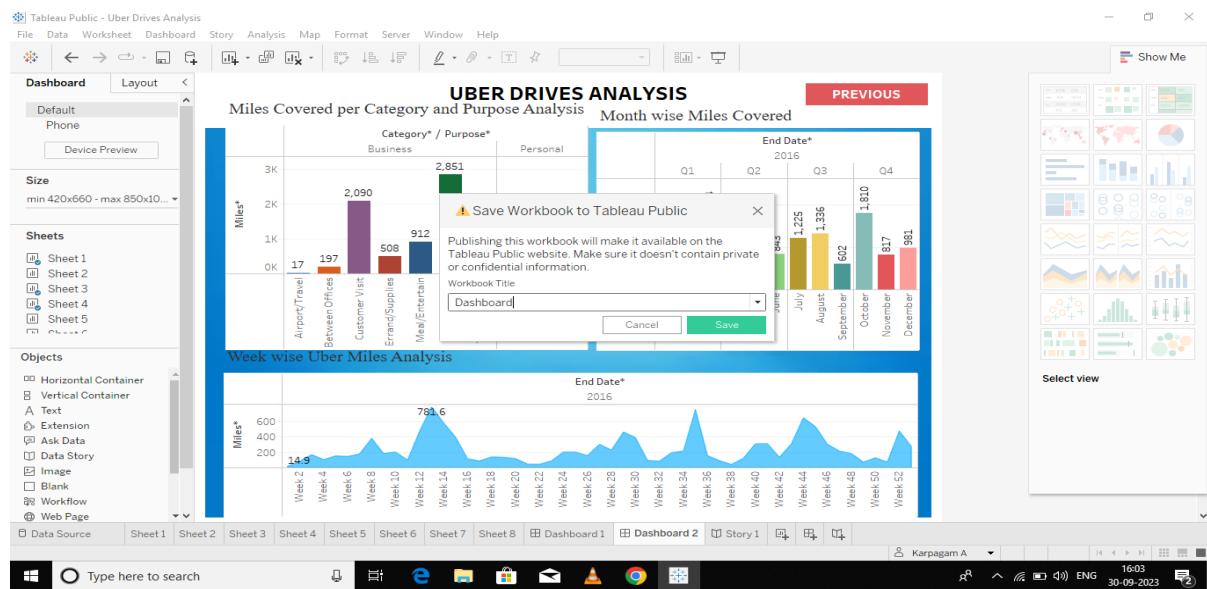
# MILESTONE 8: Publishing

Publishing dashboard and reports to tableau public

**Step 1:** Go to data Source and Select Extract so that hyper extension files are created and save it at your desktop.

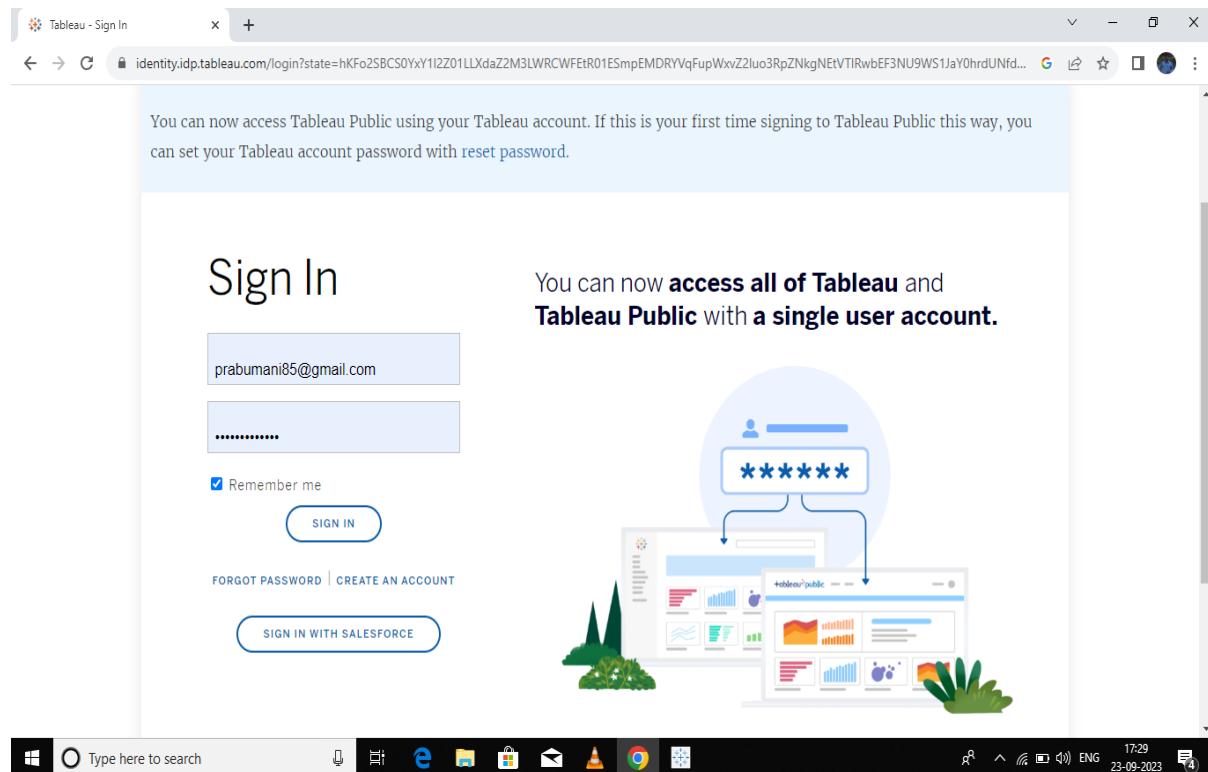


**Step 2:** Go to Dashboard, click on share button on the top ribbon.

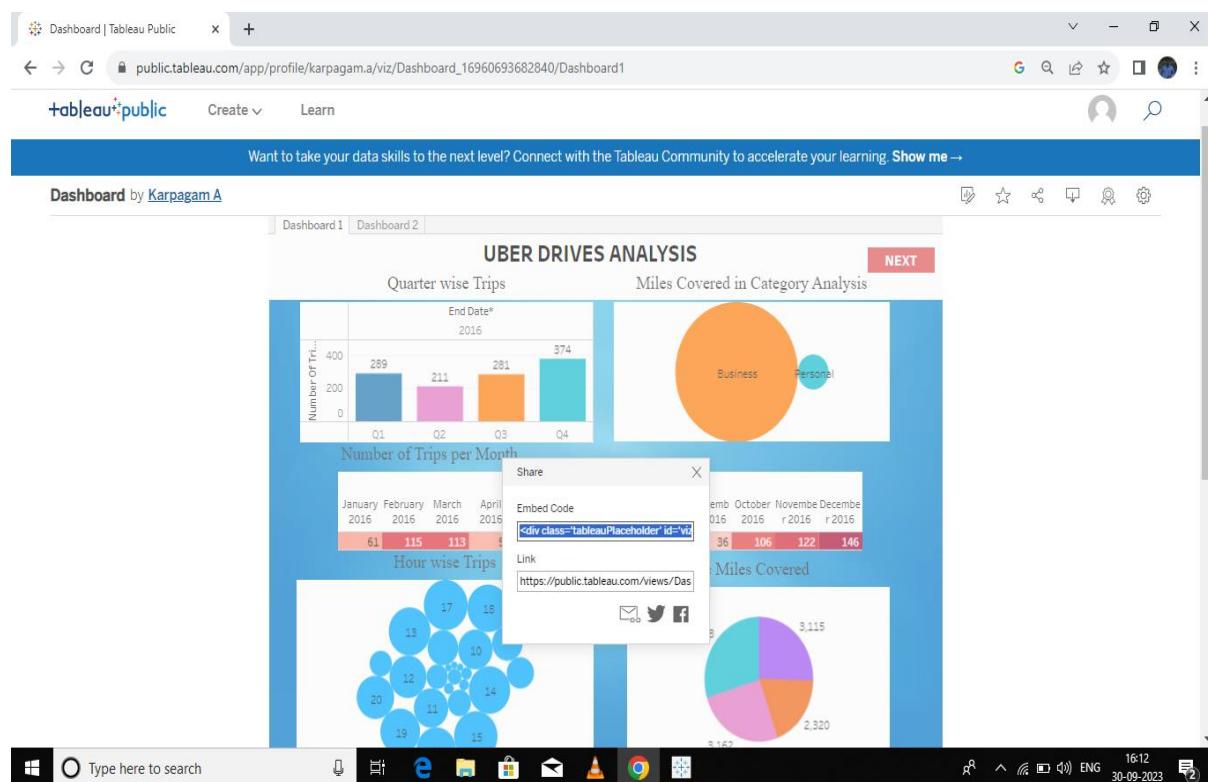


Click on "save" button to start the publishing process. Tableau Desktop will upload your workbook to Tableau Public.

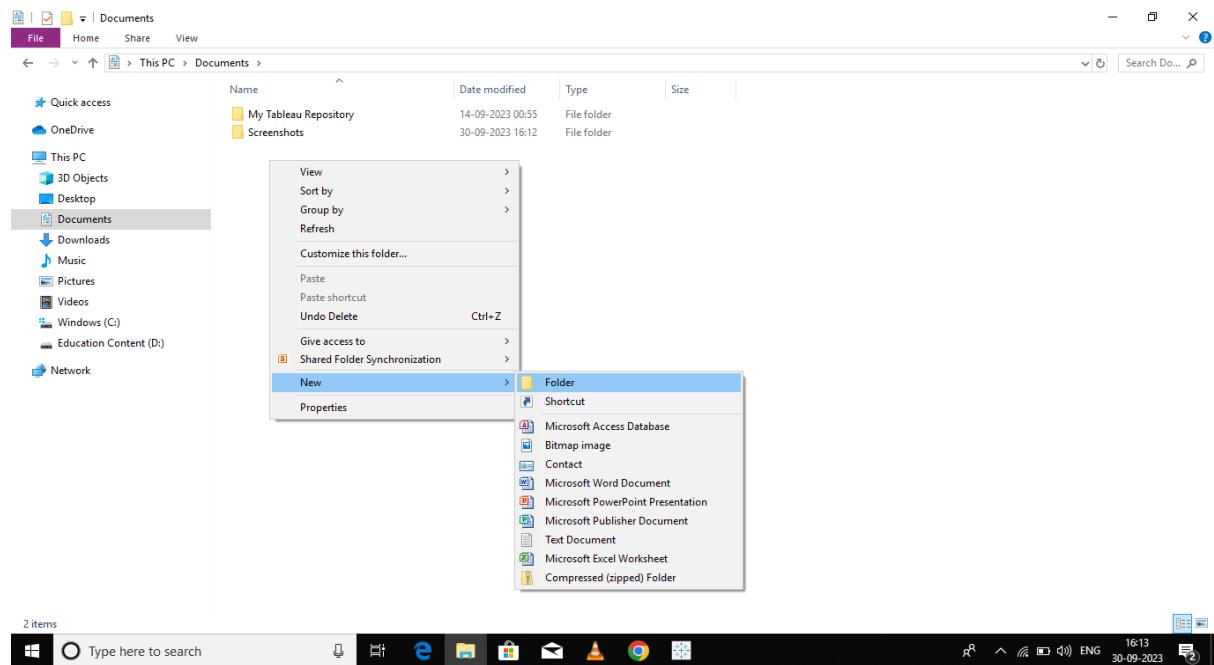
## Sign in to Tableau Public Account



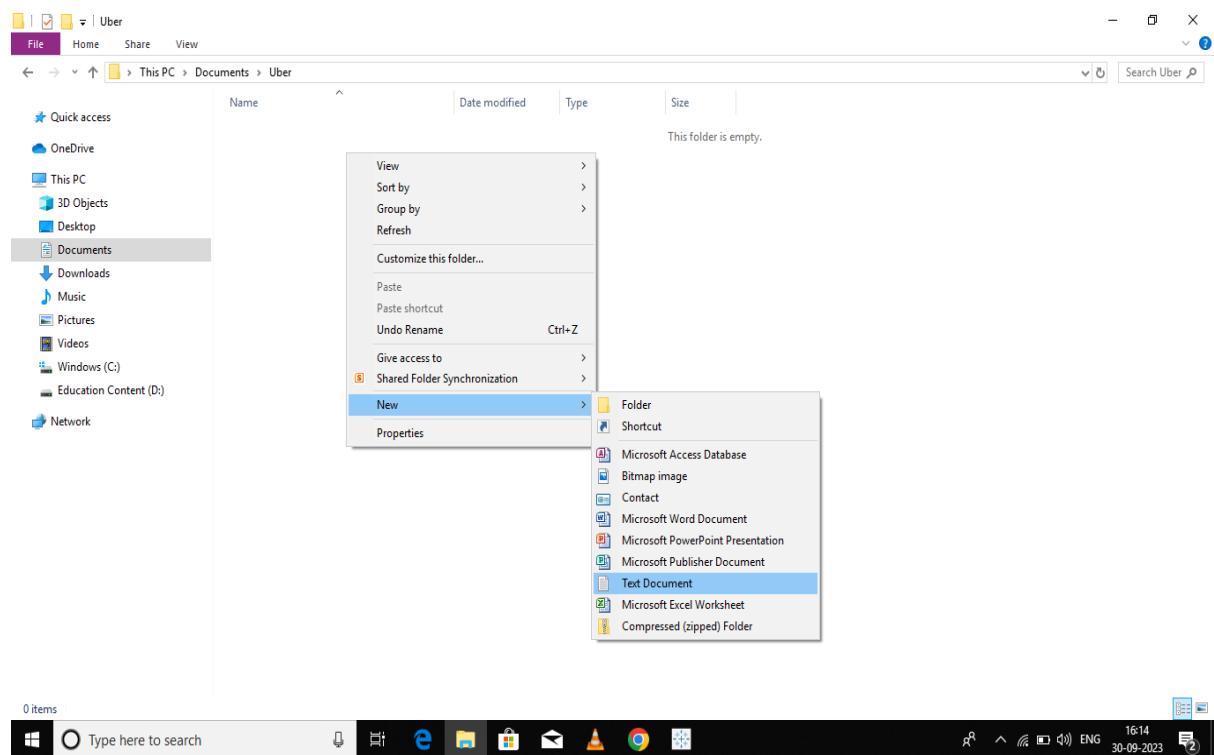
Click on “share” button and copy the embed code.



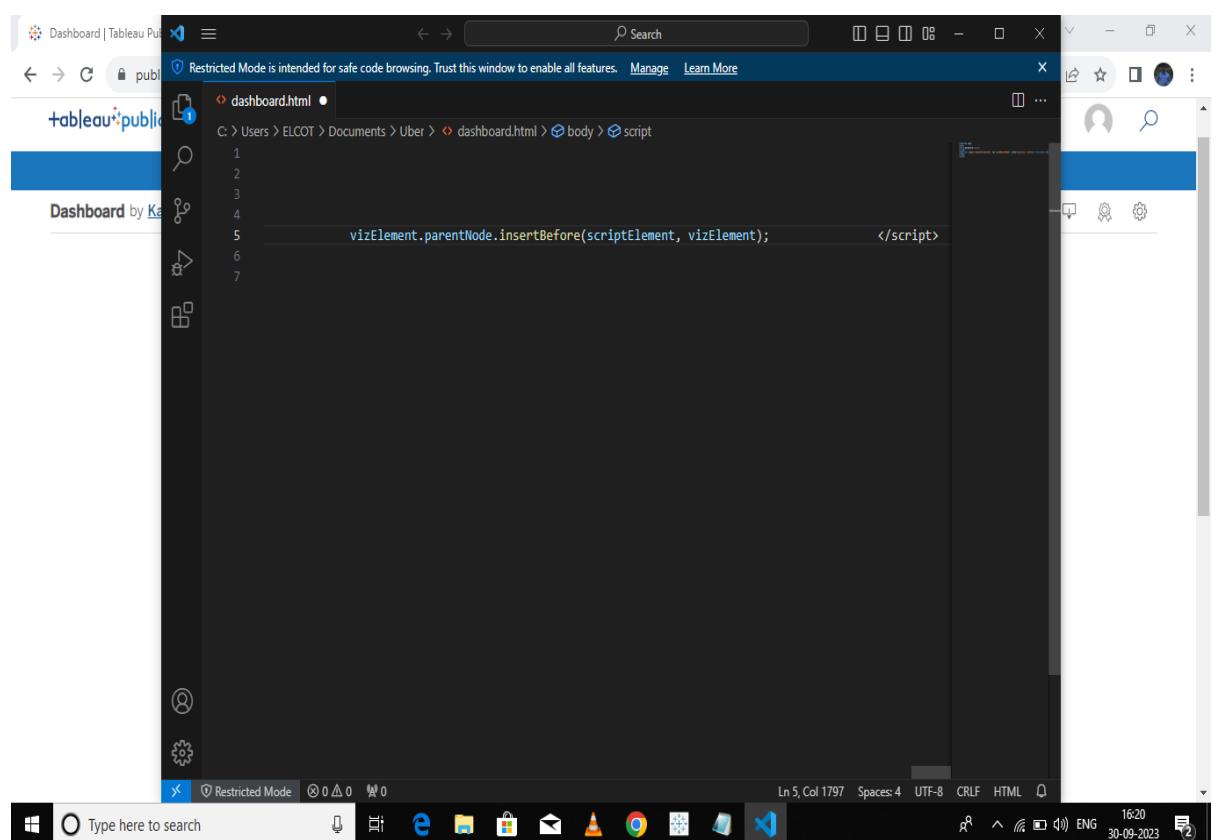
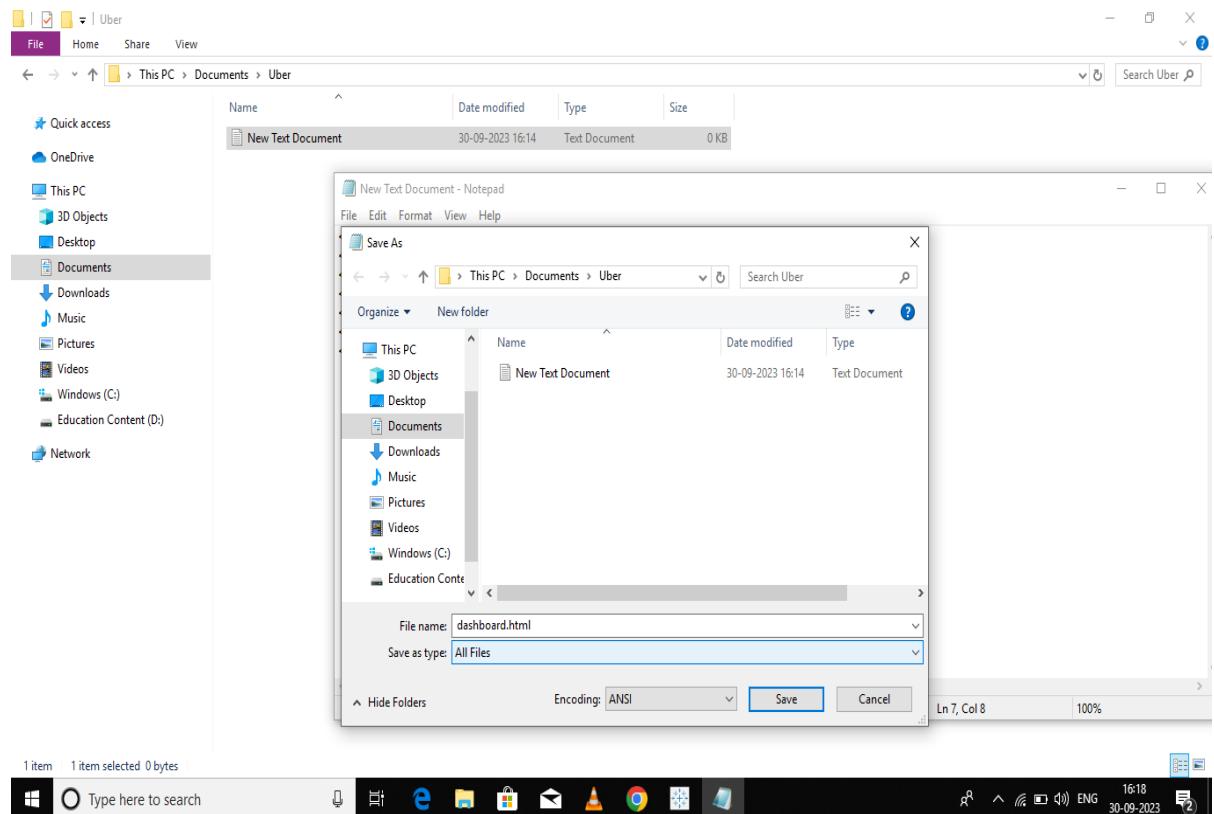
## Create new folder



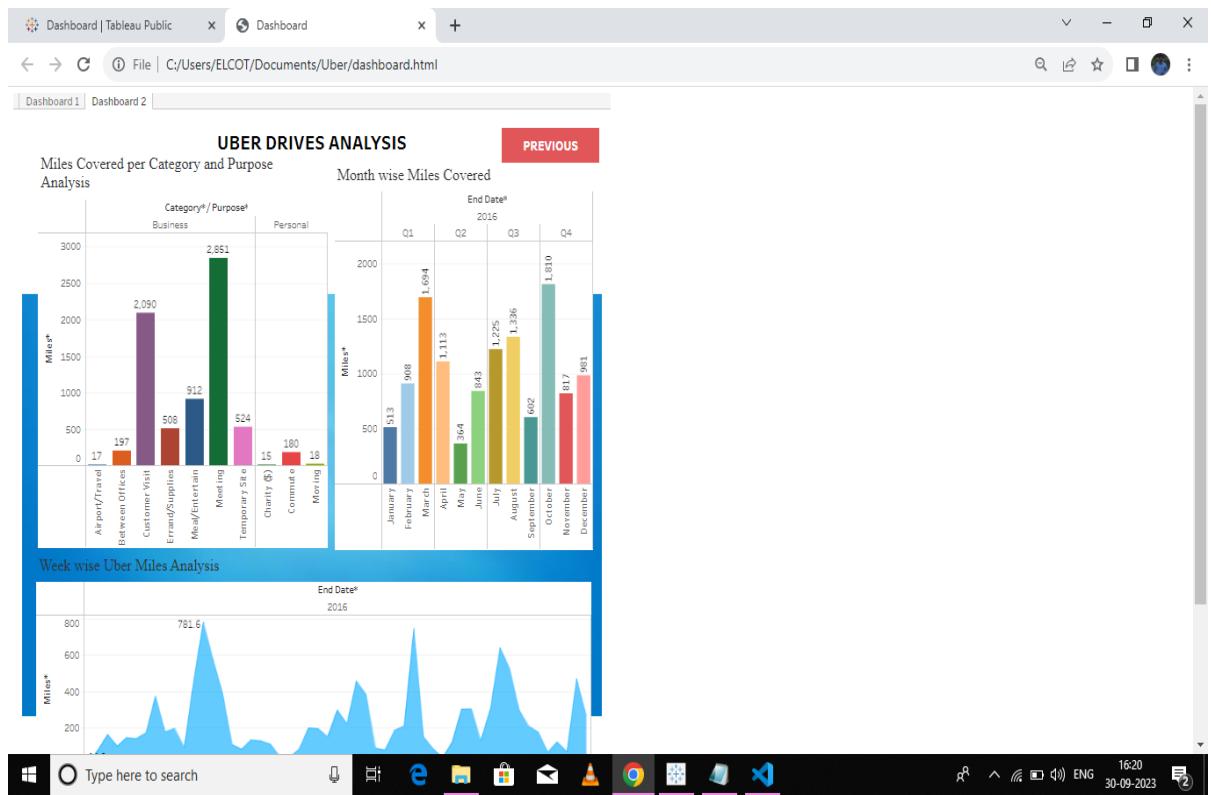
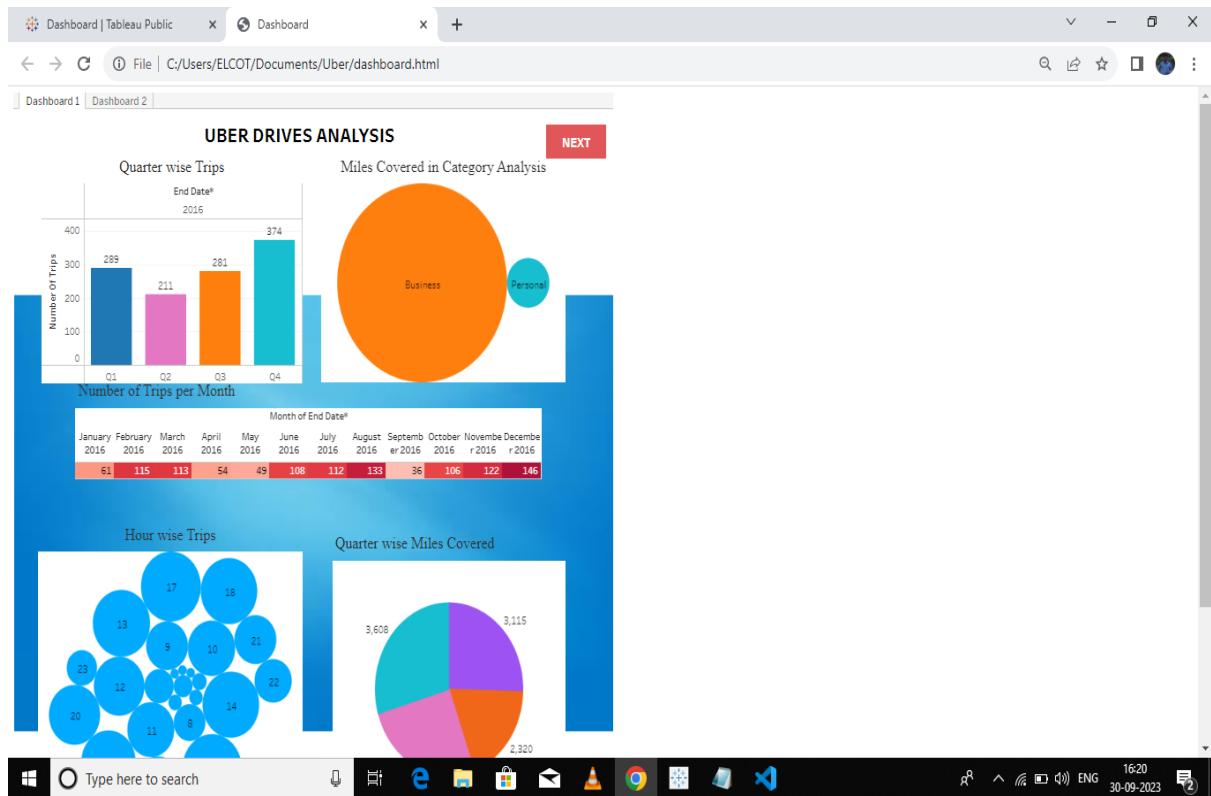
## Open a text document



# Create html page and paste the embed code in the html page.

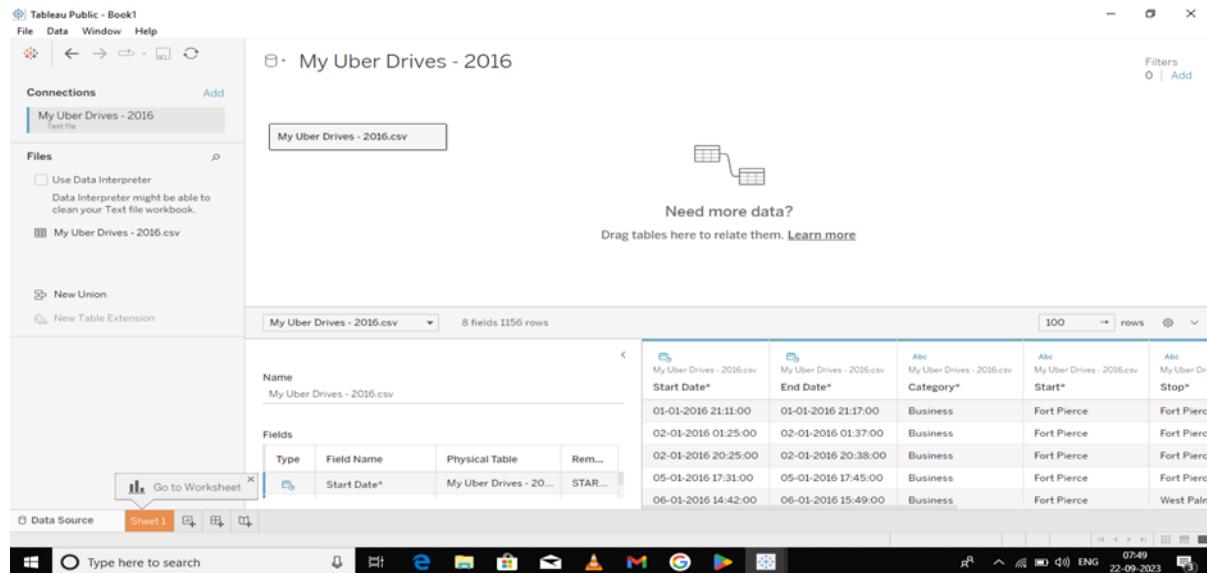


# Created dashboard.html page

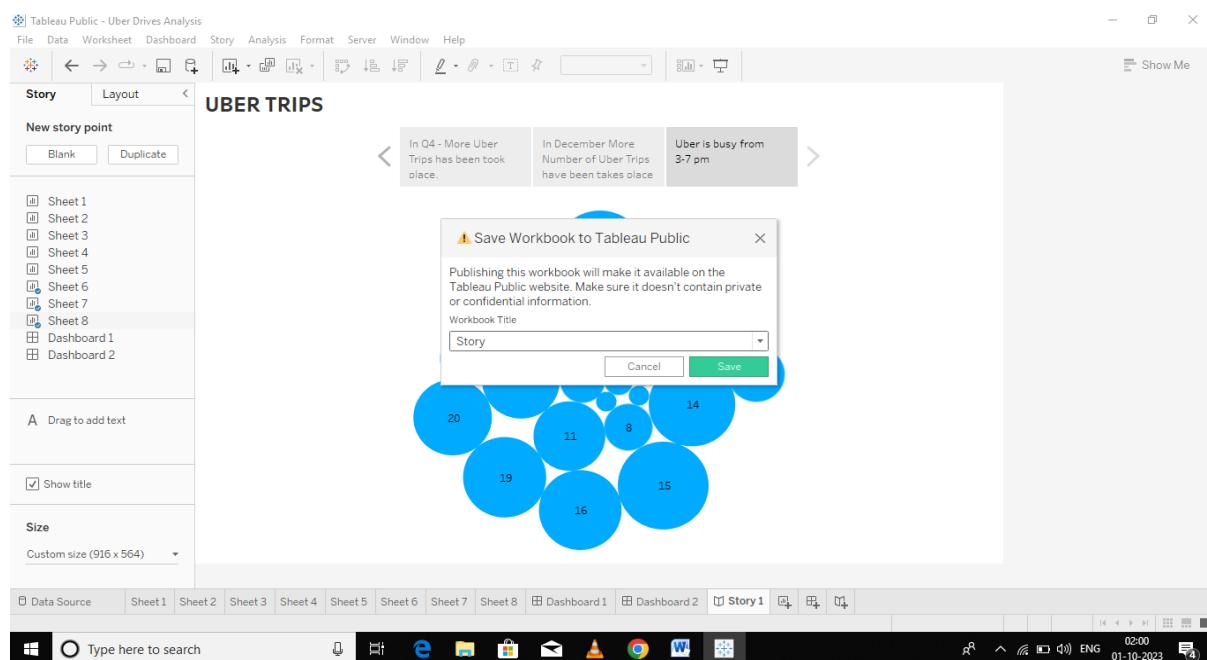


## Publishing Story and reports to tableau public

**Step 1:** Go to data Source and Select Extract so that hyper extension files are created and save it at your desktop.

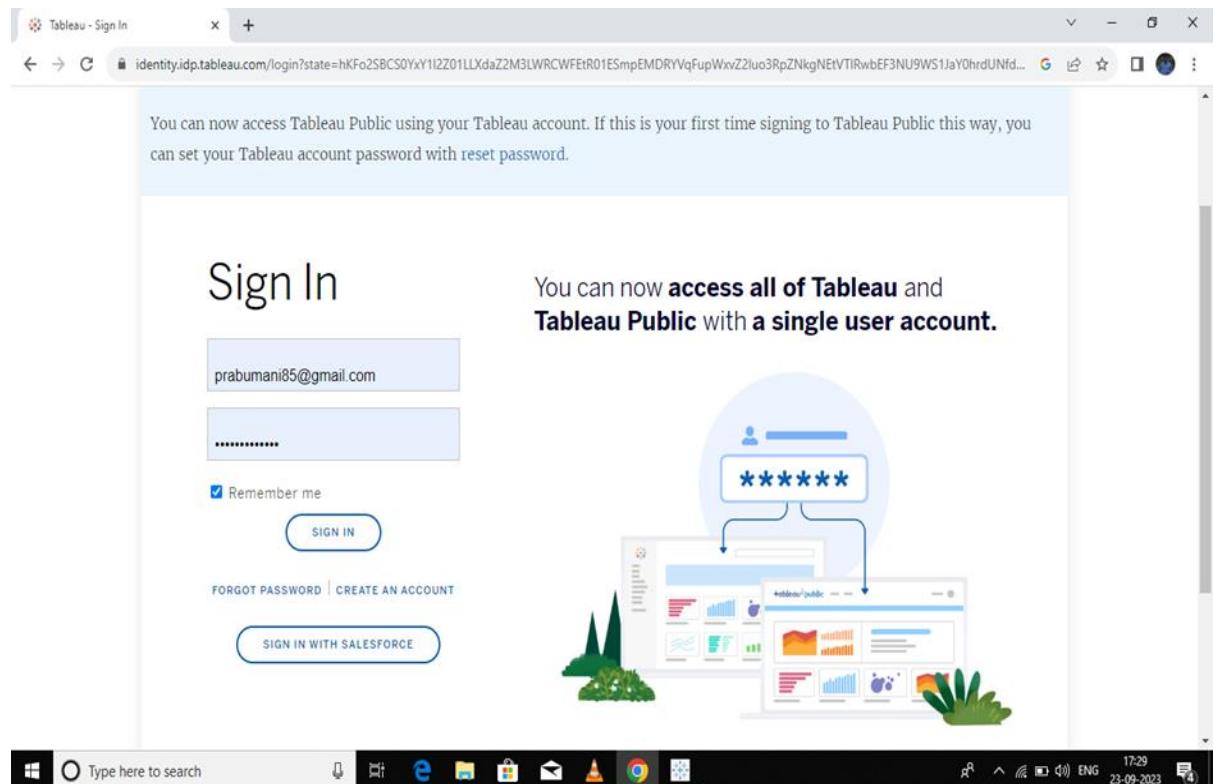


**Step 2:** Go to Story, click on share button on the top ribbon.

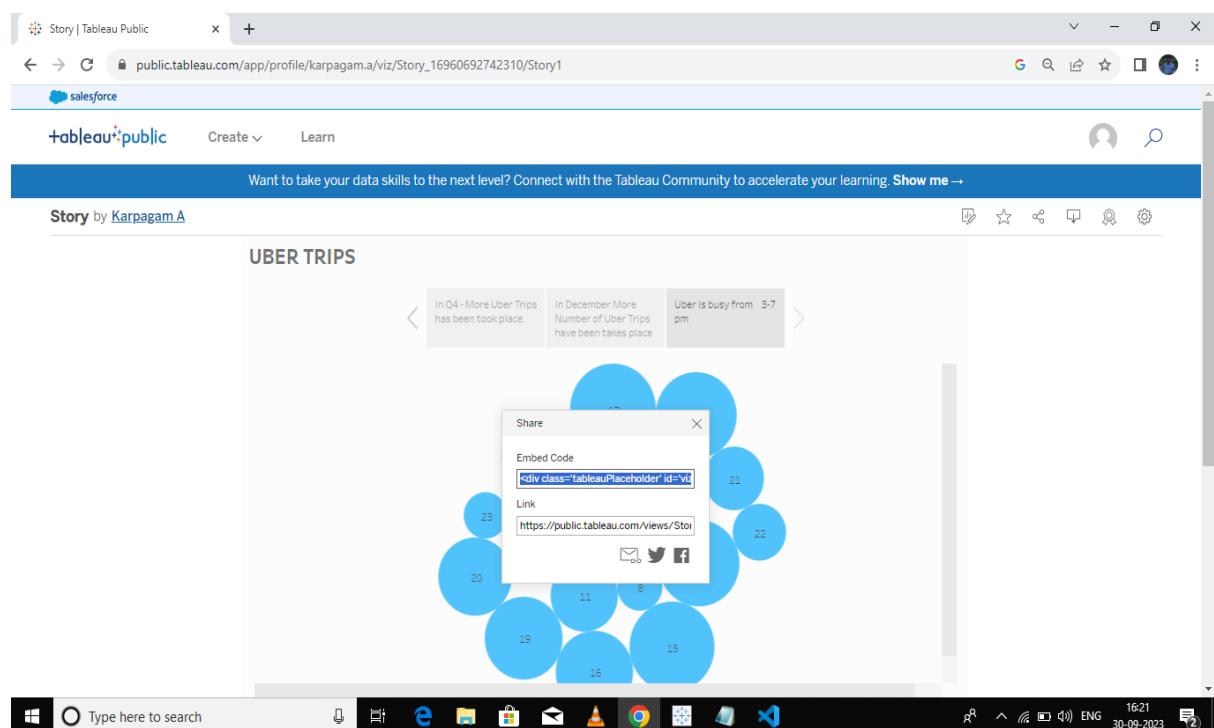


Click on “save” button to start the publishing process. Tableau Desktop will upload your workbook to Tableau Public.

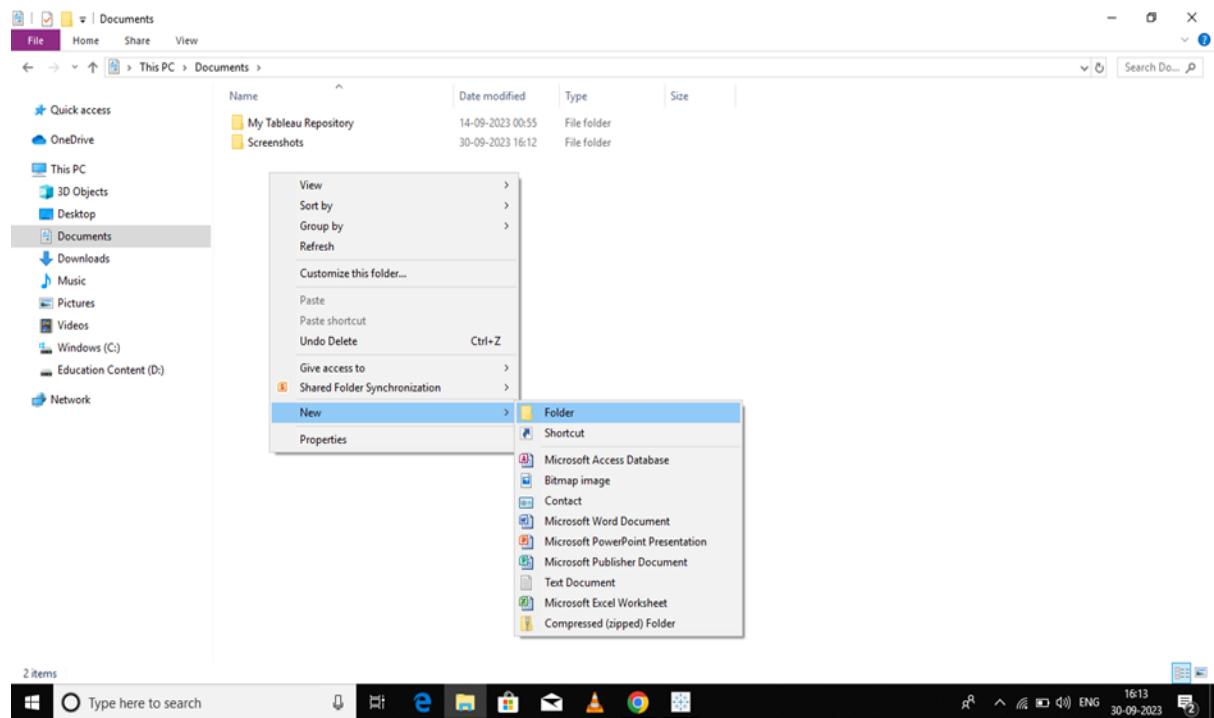
## Sign in to Tableau Public Account



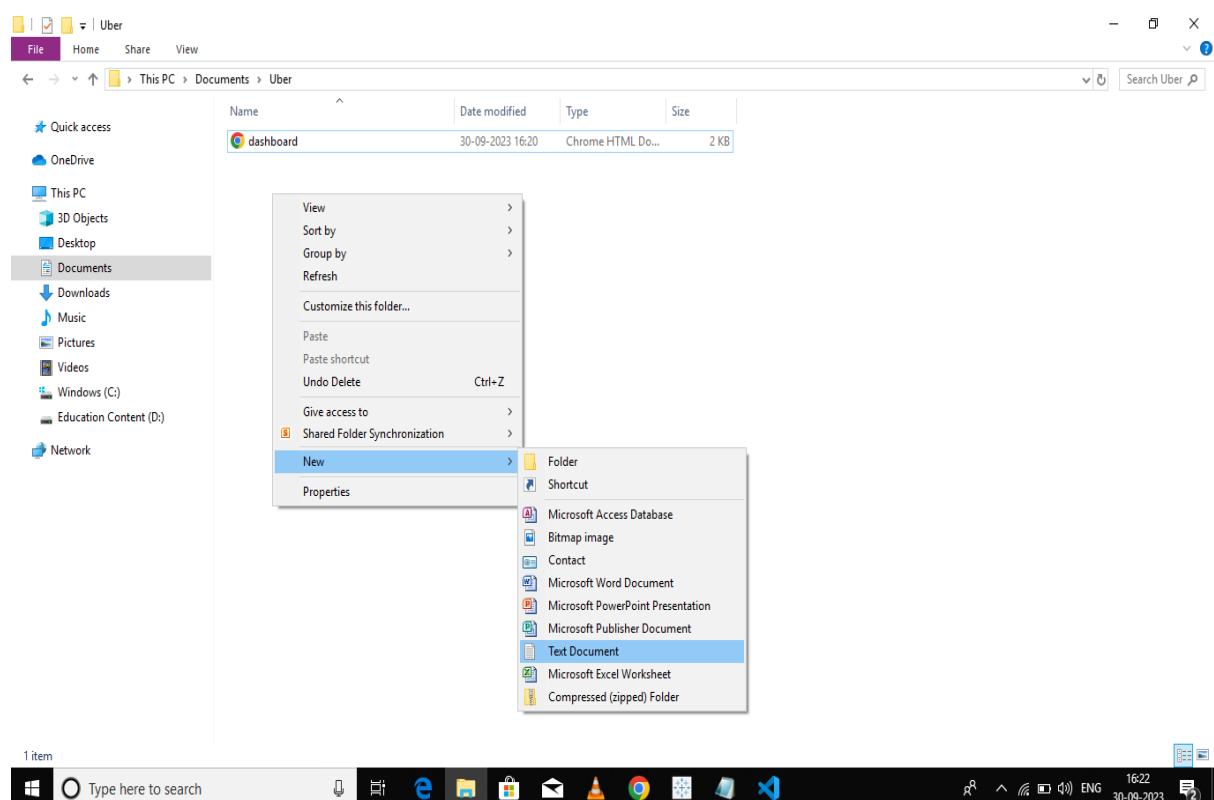
Click on “share” button and copy the embed code.



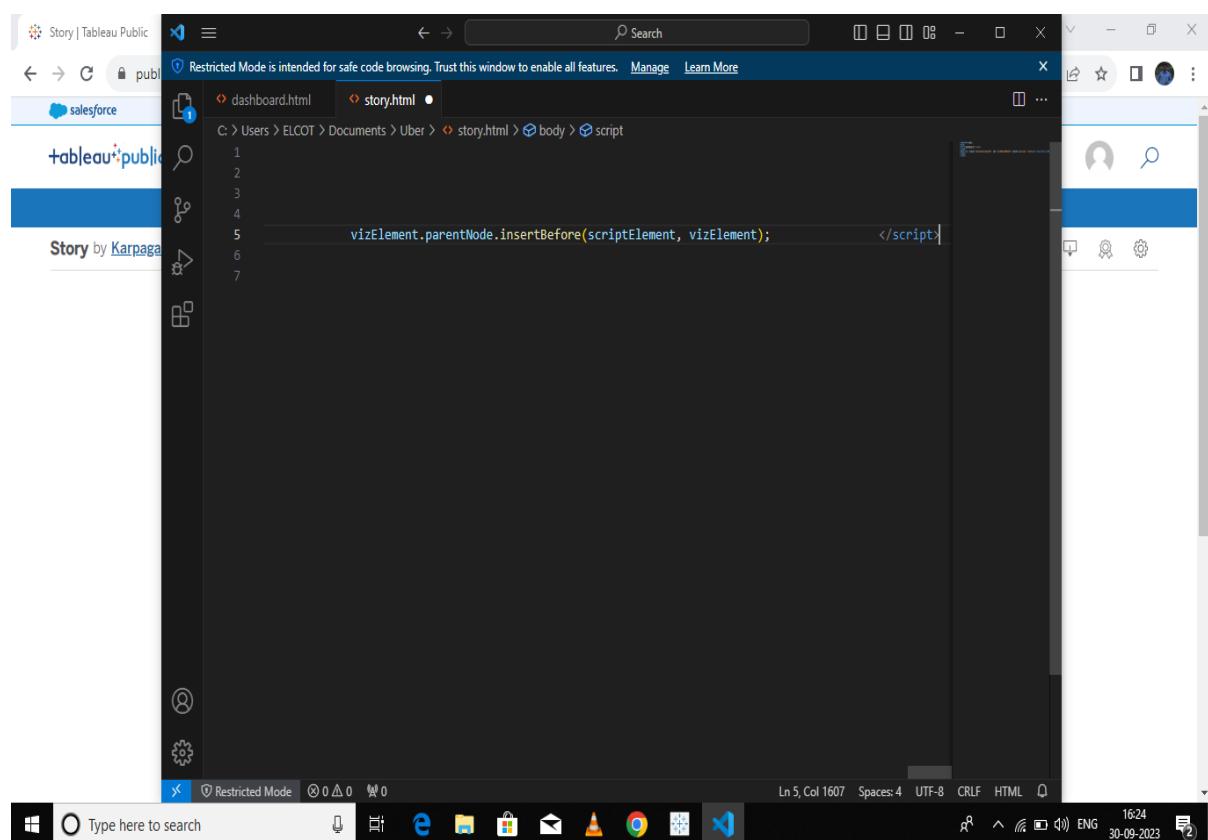
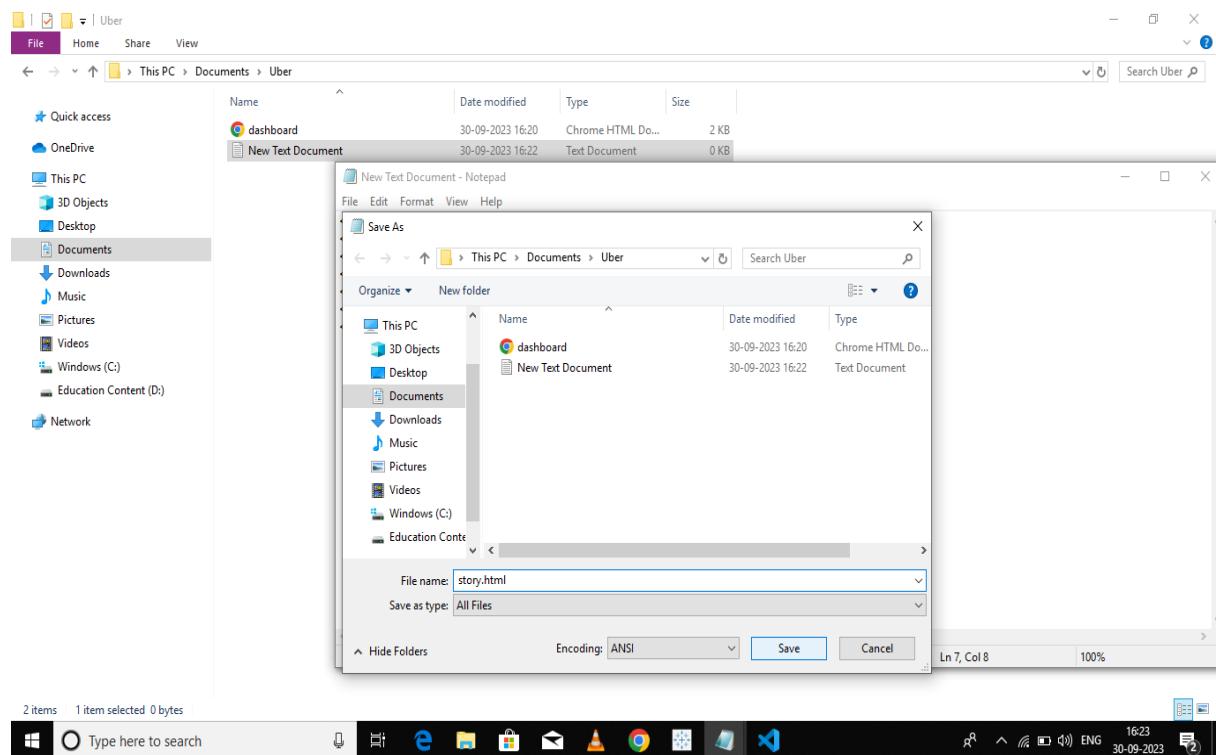
## Create new folder



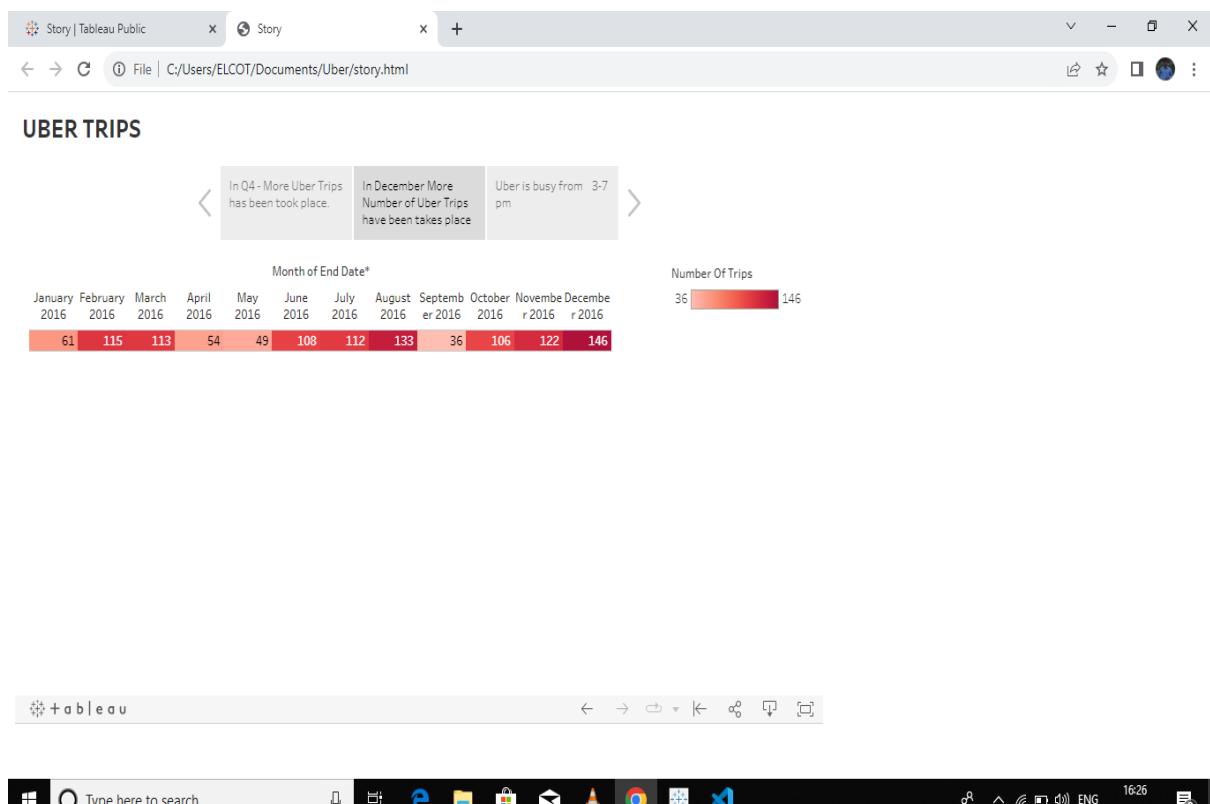
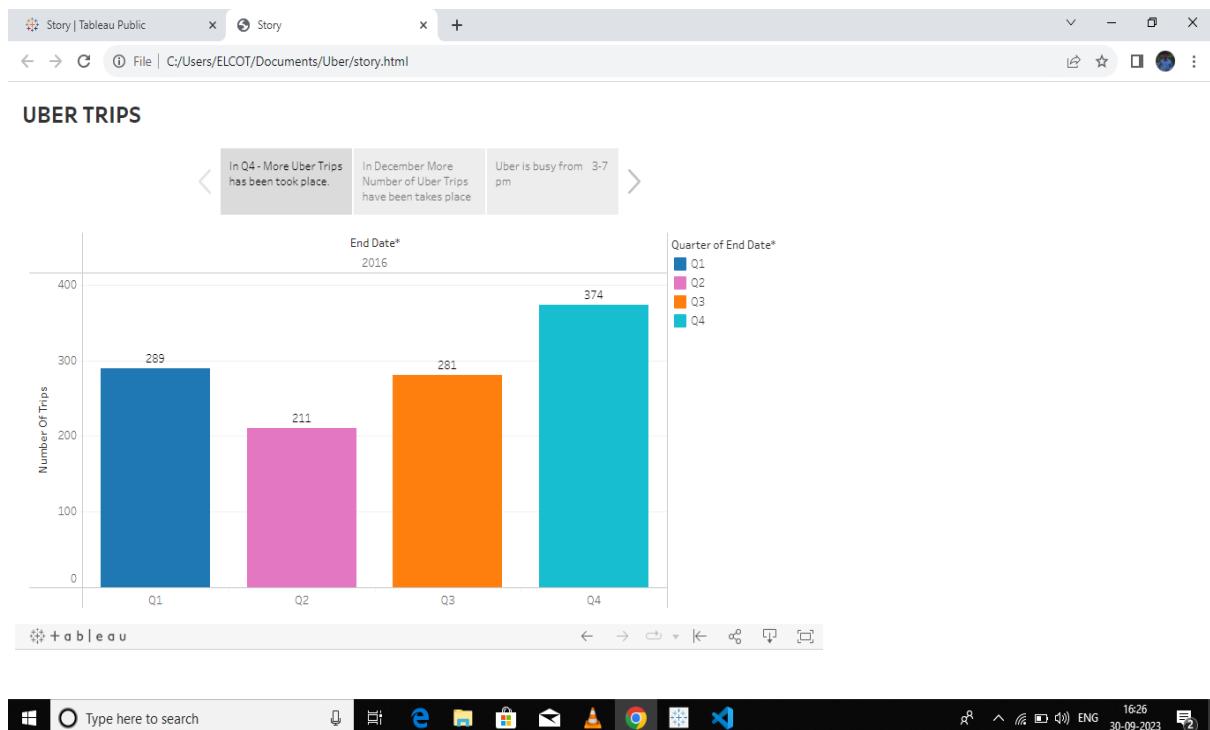
## Open a text document.

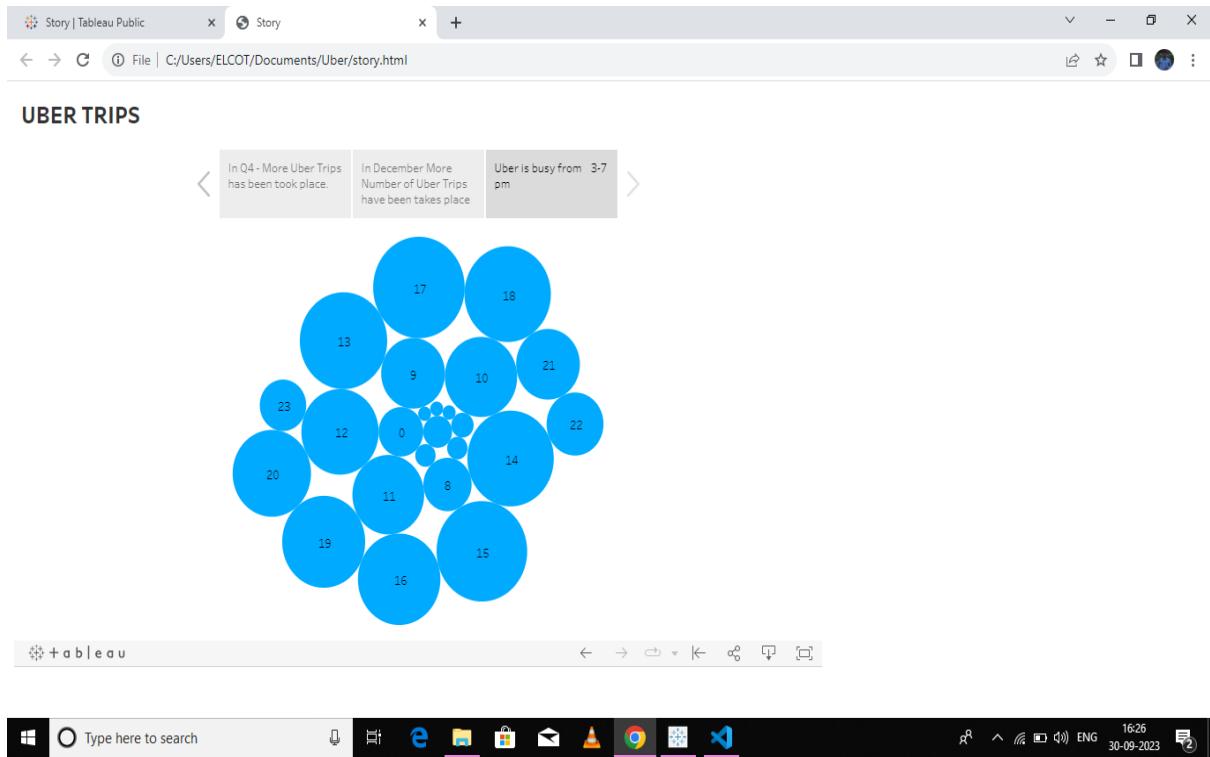


Create html page and paste the embed code in the html page.



# Created story.html page





## MILESTONE 9: Project Demonstration & Documentation

### Activity 1

Recorded explanation video link

[HTTPS://DRIVE.GOOGLE.COM/FILE/D/1CG8CARJ370IQQ2P1AYIX5WF-MYIOTOPS/VIEW?USP=DRIVE LINK](https://drive.google.com/file/d/1CG8CARJ370IQQ2P1AYIX5WF-MYIOTOPS/view?usp=drive_link)

## ADVANTAGES & DISADVANTAGES

### Advantages:

- **Convenience:** Uber offers a convenient and user-friendly way to book rides. Users can request a ride with a few taps on their smartphones, eliminating the need to hail a taxi or wait for public transportation.

- **Availability:** Uber operates in many cities and regions, providing riders with access to transportation options even in areas where traditional taxis may be scarce.
- **Cost-Effective:** In some cases, Uber rides can be more cost-effective than traditional taxi services, especially when surge pricing is not in effect. It often provides upfront pricing, so riders know the cost before booking.
- **Cashless Transactions:** Uber transactions are cashless, with payments made through the app using credit cards or digital wallets, eliminating the need for physical cash.
- **Driver Ratings:** Uber allows riders to rate drivers and provide feedback, which can lead to better service quality and driver accountability.
- **Safety Features:** The Uber app provides features like real-time tracking of rides, driver information, and the ability to share trip details with trusted contacts for safety.
- **Diverse Vehicle Options:** Uber offers various vehicle options, including standard rides, larger vehicles (UberXL), luxury cars (Uber Black), and more, catering to different preferences and needs.
- **Driver Income:** Uber provides flexible earning opportunities for drivers who can choose when and how much they want to work.

## Disadvantages:

- **Surge Pricing:** During peak times or high demand, Uber may implement surge pricing, significantly increasing the cost of rides, which can be frustrating for riders.
- **Safety Concerns:** While Uber has implemented safety features, incidents involving rider/driver safety have occurred, raising concerns about the screening and monitoring of drivers.
- **Regulatory Issues:** Uber has faced regulatory challenges in many cities, leading to legal disputes and sometimes outright bans. This can create uncertainty for riders and drivers.
- **Driver Compensation:** Some drivers report dissatisfaction with their earnings, especially when considering expenses like fuel, maintenance, and insurance.
- **Inconsistent Service:** Service quality can vary widely depending on the driver and location. Some riders may have good experiences, while others may encounter issues.
- **Lack of Employee Benefits:** Uber classifies its drivers as independent contractors, which means they do not receive benefits like health insurance, retirement contributions, or paid time off.
- **Accessibility:** Uber may not be accessible to everyone, particularly those without smartphones or internet access.
- **Environmental Impact:** The proliferation of ride-sharing services like Uber has raised concerns about increased traffic congestion and carbon emissions in some cities.

## **APPLICATIONS:**

The application should have a clear design for both drivers and passengers. The app's layout should help designers create new features without drawing a new design each time an Uber programmer develops a new feature.

## **CONCLUSION:**

In this project, we analysis Uber Expeditionary Analysis and explain the concept of Uber Trips. This analysis can help Uber drivers decide where to focus their driving efforts for maximum efficiency and profitability. We also give a brief overview of the Uber trips and to find unknown pattern in the Uber Drives dataset.

## **FUTURE SCOPE:**

- Cheaper cars by buying used
- Less expensive hybrid vehicles
- More accurate GPS technology
- Discounted rates for multi-hours bookings
- Pay premium for on-demand service