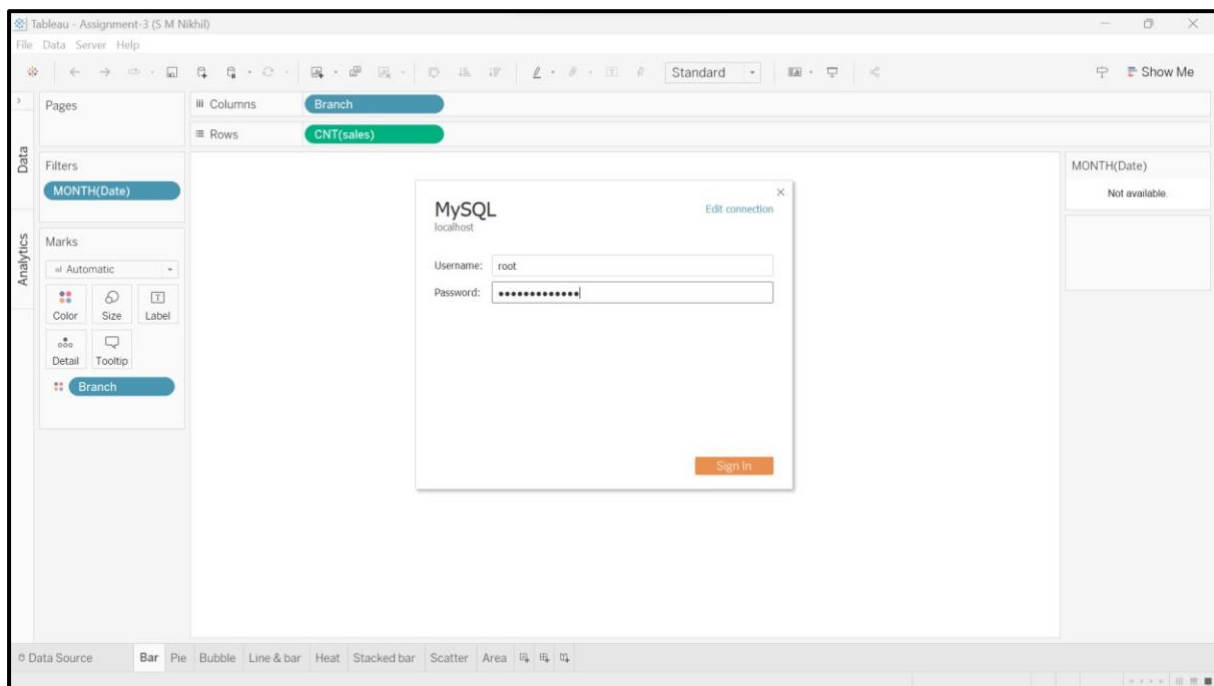
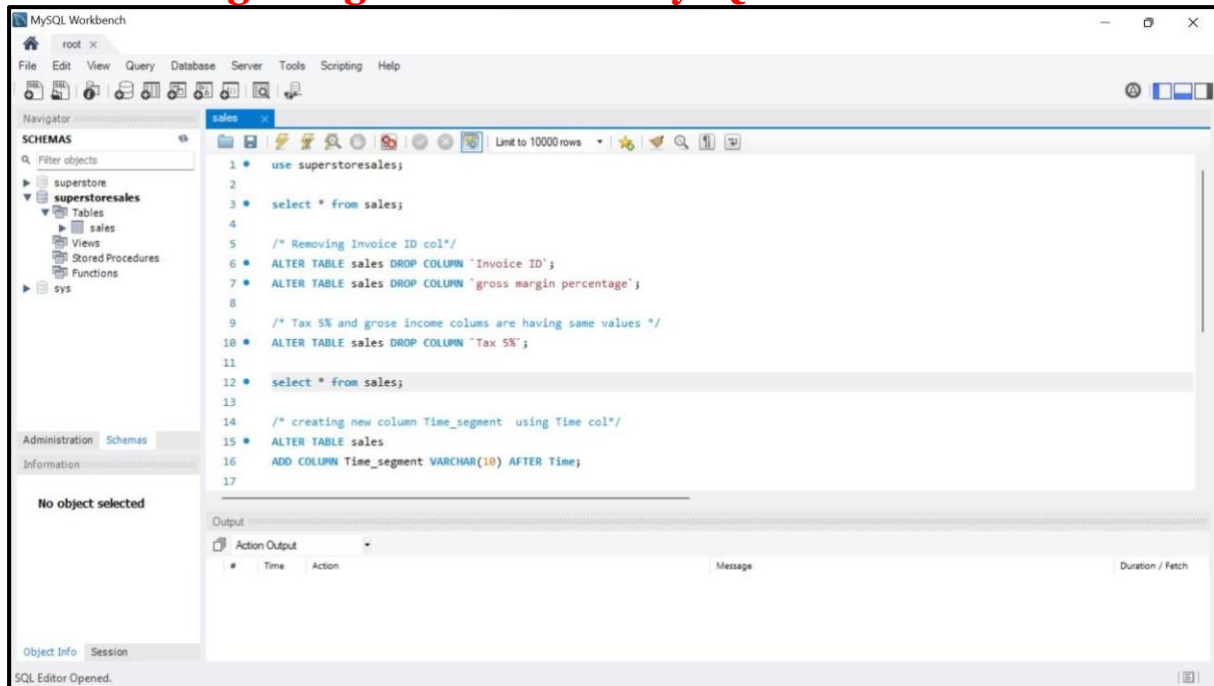


# Tableau Analytics

## Assignment – 3

### 1. Integrating Tableau with MySQL



### 2. SQL code of data manipulation:

Code:

```
use superstoresales; select
```

```
* from sales;
```

```
/* Removing Invoice ID col*/
```

```
ALTER TABLE sales DROP COLUMN `Invoice ID`;
```

```
ALTER TABLE sales DROP COLUMN `gross margin percentage`;
```

```
/* Tax 5% and grose income colums are having same values
```

```
*/ ALTER TABLE sales DROP COLUMN `Tax 5%`; select * from  
sales;
```

```
/* creating new column Time_segment using Time col*/
```

```
ALTER TABLE sales
```

```
ADD COLUMN Time_segment VARCHAR(10) AFTER Time;
```

```
UPDATE sales
```

```
SET Time_segment =
```

```
    CASE
```

```
        WHEN TIME_FORMAT(Time, '%H:%i:%s') BETWEEN '06:00:00' AND  
'11:59:59' THEN 'Morning'
```

```
        WHEN TIME_FORMAT(Time, '%H:%i:%s') BETWEEN '12:00:00' AND  
'17:59:59' THEN 'Afternoon'
```

```
        ELSE 'Night'
```

```
    END;
```

```
/* adding Discount colum */
```

```
ALTER TABLE sales
```

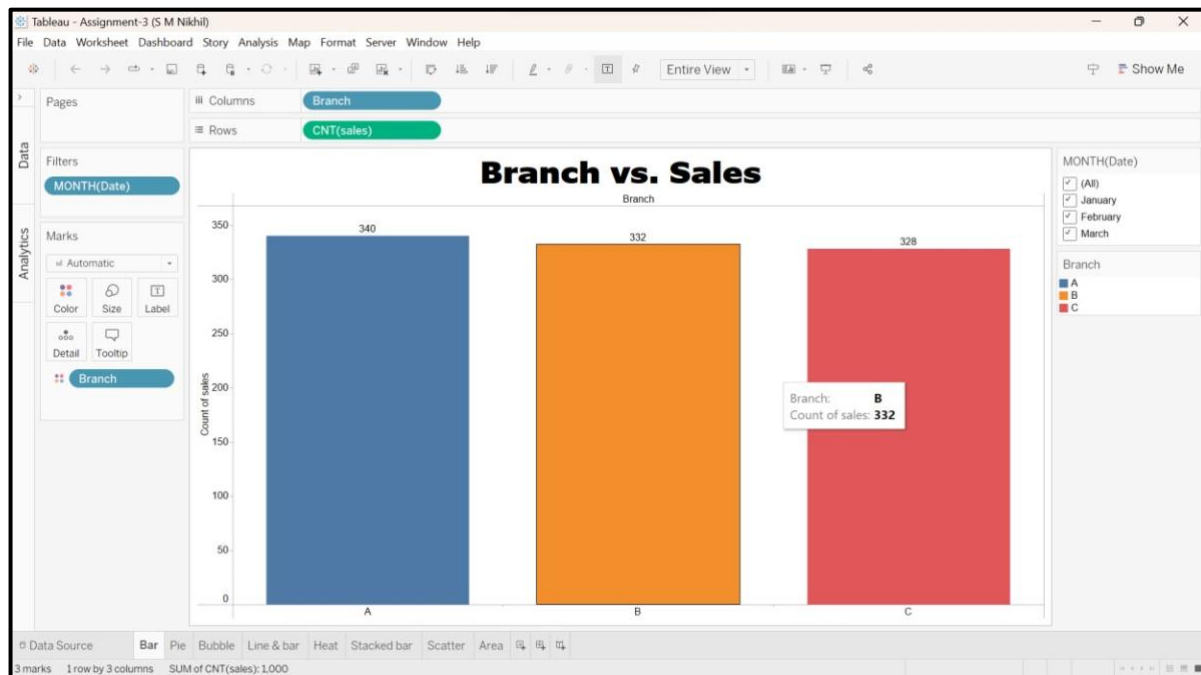
```
ADD COLUMN Discount Int(10) AFTER Total;
```

```
UPDATE sales
```

```
SET Discount = Total - (`Unit price` * `Quantity`);
```

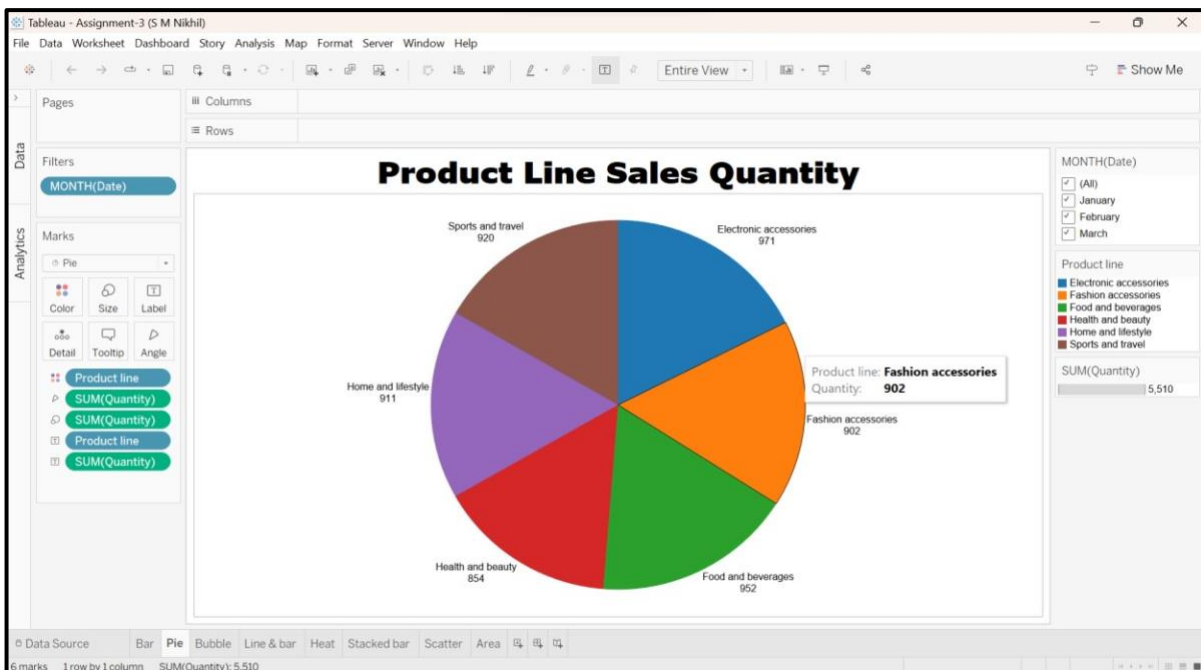
### 3. Data Visualizations:

#### 1. Bar Chart:



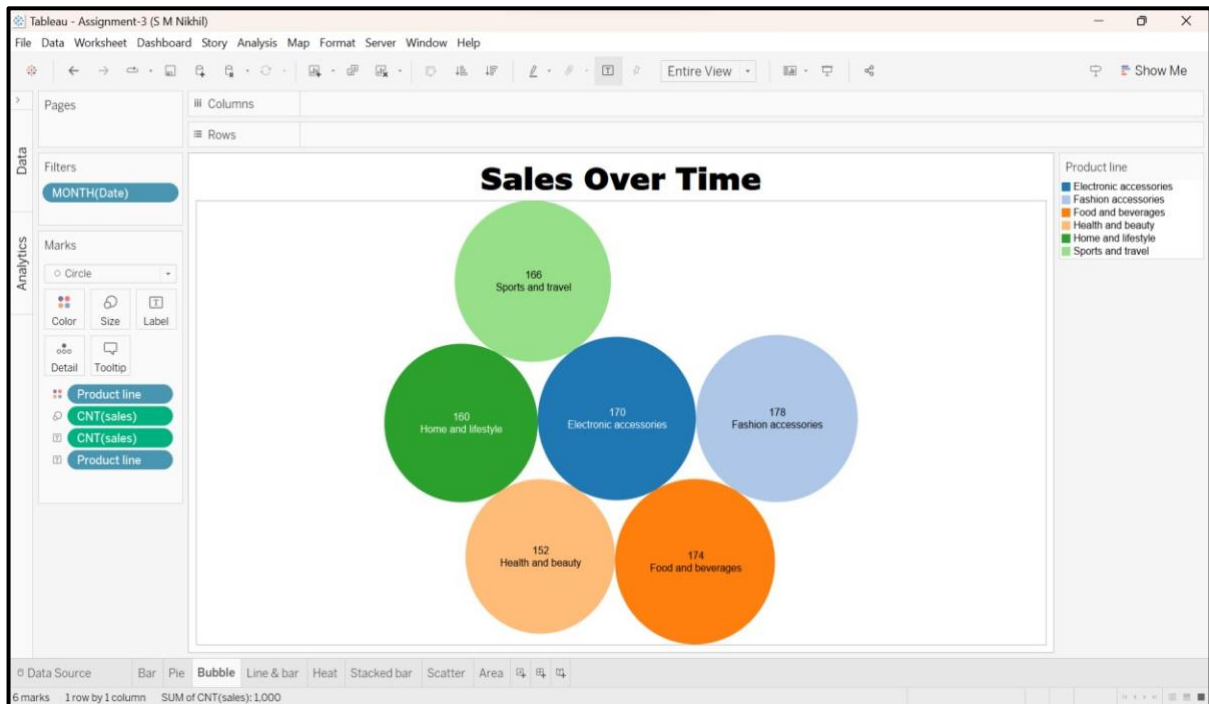
Count of sales for each branch. Colour shows details about branch. The data is filtered on month, which keeps January, February and March.

#### 2. Pie - Chart:



Productline and sum of quantity. Colours show details about Productline. Size shows sum of quantity. The marks are labelled by Productline and sum of quantity. The data is filtered on date month , which keeps January ,February and March.

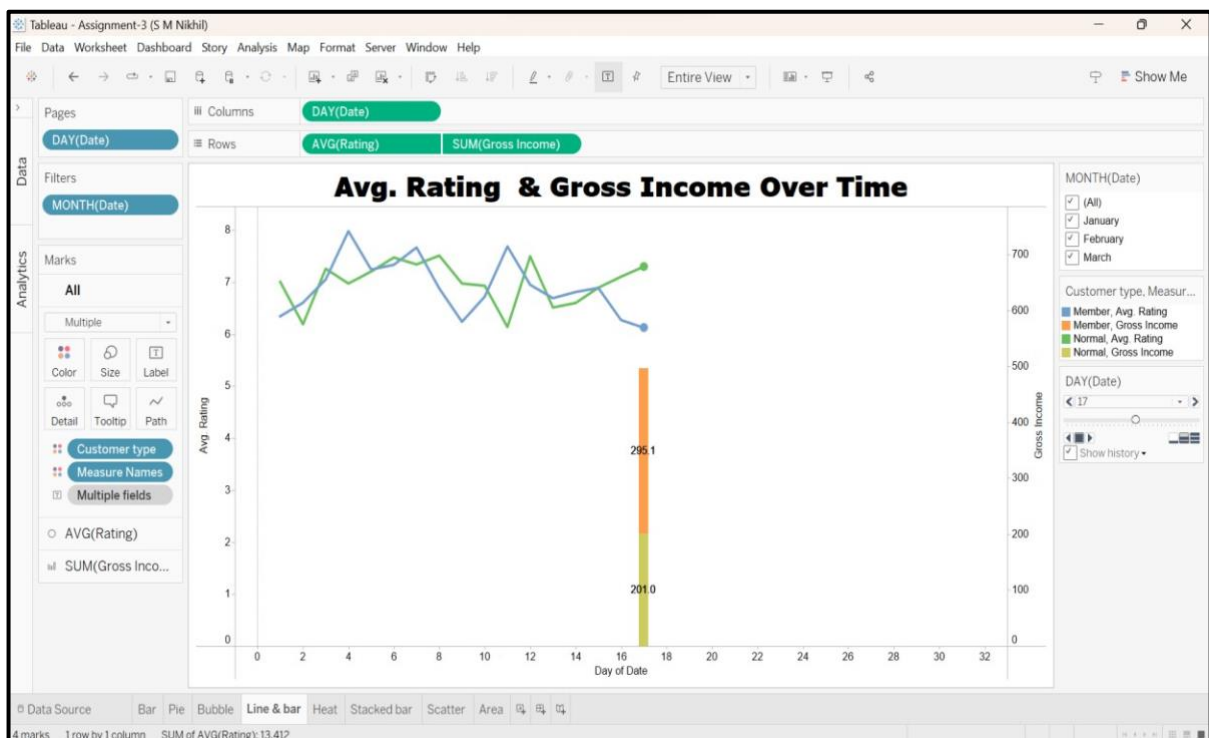
#### 3. Bubble Chart:

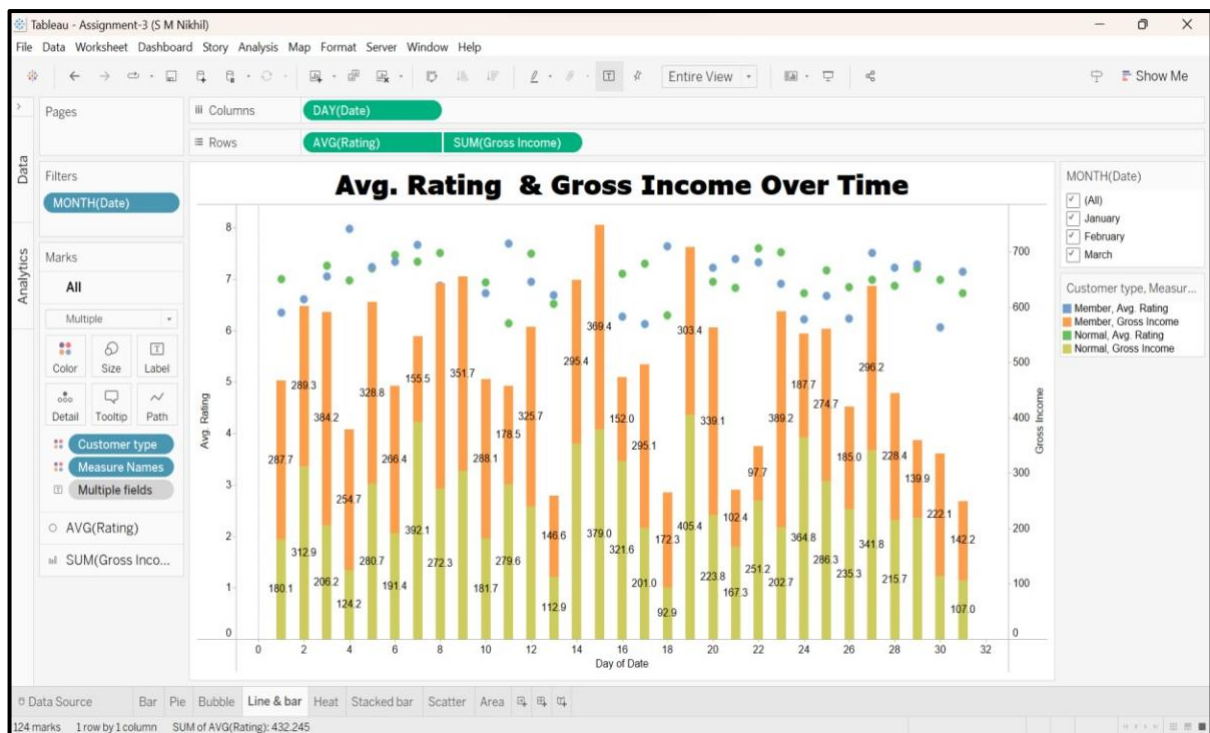


Count of sales and Productline. Colour shows details about Productline. Size shows count of sales. The marks are labelled by count of sales and Productline. The data is filtered on Month which keeps January , February and March.

#### 4. Line & Bar Chart:

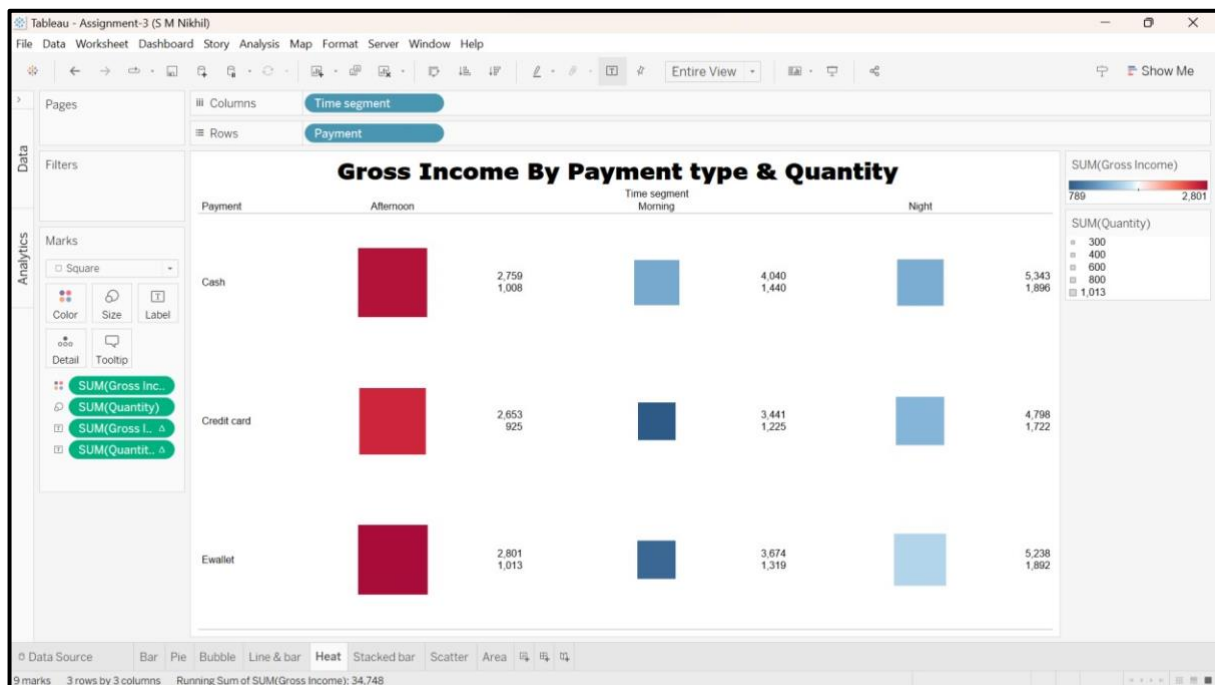
Animations are applied to the below chart By Individual date in a month(i.e. 30-31days)





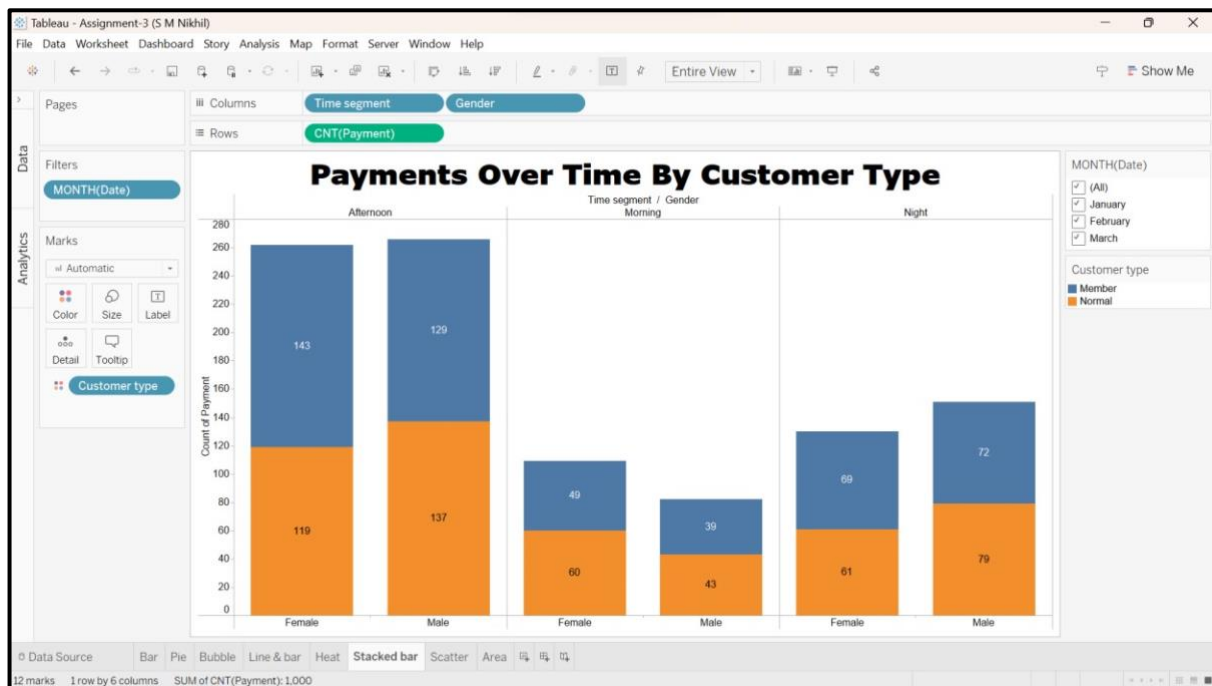
The plots of Avg. Rating and GrossIncome for Date Day . Colour shows details about Customertype , Avg. Rating and GrossIncome. For pane Sum of GrossIncome:The marks are labelled by GrossIncome. The data is filtered on Month, which keeps January ,February and March.

## 5. Heat Maps:



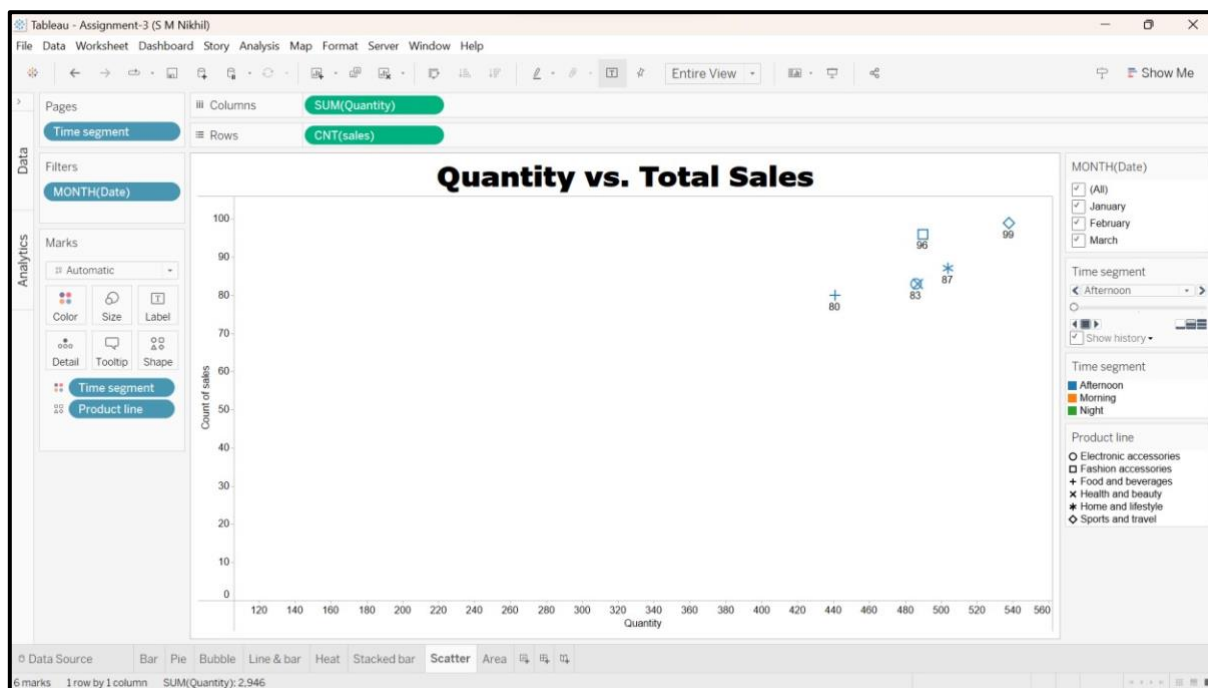
Running Sum of Gross Income and running sum of quantity broken down by time segment vs. Payment. Colour shows sum of grossincome. Size shows sum of quantity. The marks are labelled by running sum of gross income and running sum of Quantity.

## 6. Stacked Bar Chart:

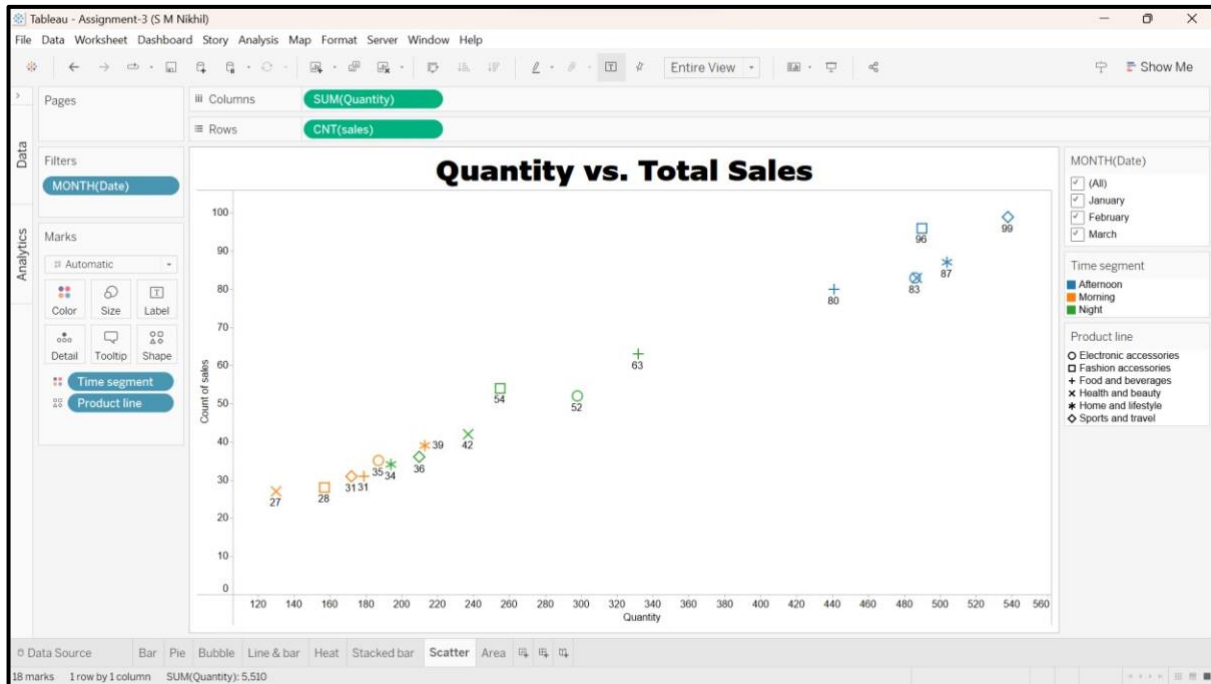


Count of Payment for each Gender broken down by Timesegment. Color shows details about Customer type. The data is filtered on Month which keeps January, February and March.

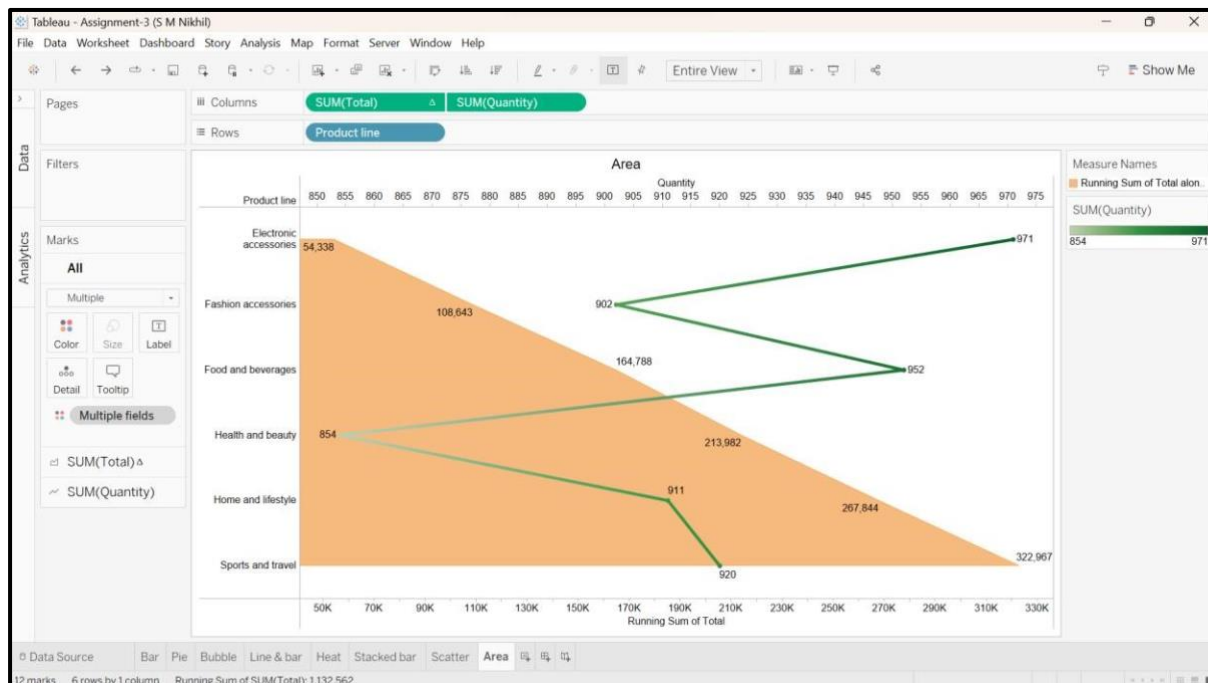
## 7. Scatter Plot:



Sum of Quantity vs. count of sales. Colour shows details about Timesegment. Shape shows details about Productline. The data is filtered on Month, which keeps January, February and March.



## 8. Area Chart :



The trends of Running Sum of Total along Table(Down) and sum of Quantity for Productline. Forpane Running Sum of Total: Colour shows details about Running Sum of Total along Table(Down). For pane Sum of Quantity: Colour shows sum of Quantity