Unearthing the Environmental Impact of Human Activity: A Global CO2 Emission Analysis

A PROJECT REPORT

Submitted by

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CONTENT

CHAPTER - 1

INTRODUCTION

1.INTRODUCTION :

Global warming is one of the biggest challenges currently being faced by the human race, although correlation is not causation, a likely cause of global warming is due to increased atmospheric carbon dioxide from human activities. CO_2 Emission refers to the Carbon Dioxide emitted throughout the world. For this analysis we will be focusing on CO_2 Emissions and its effect on the world we live in as well as some key factors and stats that may play a role in the emission of CO_2 globally. Fossil fuel use is the primary source of CO_2. The data throws light onto how much fossil fuels are burnt, per year per nation, which amounts to an increase in CO_2 every year. This will help researchers and environment experts to predict global warming. So countries should set a goal to decrease this amount yearly. Analysing Global CO_2 Emission across countries from 1975 to 2020. This dataset contains a record of CO_2Emission by each Country and Region of Earth, here we are going to analyse and visualise Country wise, Region wise and Overall CO_2 Emission on Earth.

Technical Architecture:
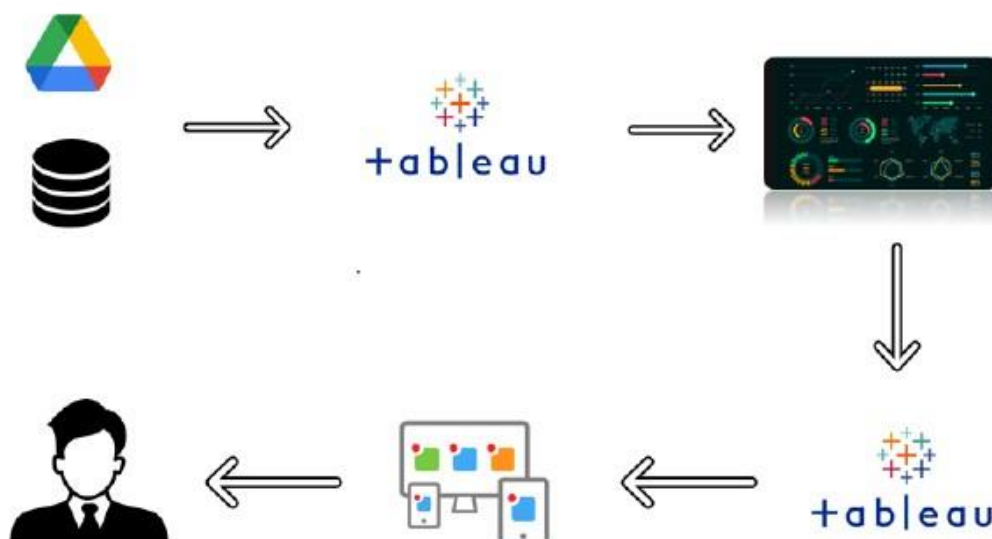
1.1. OVERVIEW :

To accomplish this, we have to complete all the activities listed below,

● **Define Problem / Problem Understanding**

Specify the business problem

Business requirements

Literature Survey

Social or Business Impact.

● **Data Collection & Extraction from Database**

Collect the dataset,

Storing Data in DB

Perform SQL Operations

Connect DB with Tableau

● **Data Preparation**

Prepare the Data for Visualization

● **Data Visualizations**

No of Unique Visualizations

● **Dashboard**

Responsive and Design of Dashboard

● **Story**

No of Scenes of Story

● **Performance Testing**

Amount of Data Rendered to DB

Utilization of Data Filters

No of Calculation Fields

No of Visualizations Graphs

● **Web Integration**

Dashboard and Story embed with UI With Flask

● **Project Demonstration & Documentation**

Record explanation Video for project end to end solution

Project Documentation-Step by step project development procedure

A BRIEF DESCRIPTION ABOUT YOUR PROJECT :

Carbon dioxide (CO_2) is released into Earth's atmosphere mostly by the burning of carbon-containing fuels and the decay of wood and other plant matter. Under all conditions found naturally on Earth, CO_2 is an invisible, odourless gas. It is removed from the atmosphere mostly by plants, which extract carbon from CO_2 to build their tissues, and by the oceans, in which CO_2 dissolves.

1.2 PURPOSE :

We emit so much CO_2 into the atmosphere that, if carbon capture is going to play any significant part in the fight against climate change, we will have to store most of the captured CO_2 underground. But "utilization"—selling the CO_2 as a valuable product—could help create markets for carbon capture, and make it cheaper for companies to invest in capturing their CO_2 emissions.

The main use for CO2 today is enhanced oil recovery: pumping CO_2 into oil wells to help flush out hard-to-extract oil. Pure CO_2 is also used in greenhouses to grow plants. Most CO_2 used for these purposes today is extracted from the earth, but captured CO_2 works just as well.

CO2 could also be made into useful products. Companies and labs are working on turning CO_2 into plastics, building materials like cement and concrete, fuels, futuristic materials like carbon fibers and graphene, and even household products like baking soda, bleach, antifreeze, inks and paints. Some of these products are already being sold, but none in very large amounts.

Or we could use the CO2 to grow algae or bacteria. This can then be the basis for making biofuels, fertilizers, or animal feed.

USES OF THE PROJECT. WHAT CAN BE ACHIEVED USING THIS :

CO2 Emissions in 2022 provides a complete picture of energy-related greenhouse gas emissions in 2022. The report finds that global growth in emissions was not as high as some had originally feared amid the disruptions caused by the global energy crisis. This latest release brings together the IEA's latest analysis, combining the Agency's estimates of CO2 emissions from all energy sources and industrial processes, as well as providing information on energy-related methane and nitrous oxide emissions.

This report is part of the IEA's support of the first global stocktake of the Paris Agreement, which will be finalized in the run up to COP28, the next UN Climate Change Conference, at the end of 2023. Find other reports in this series on the IEA's Global Energy Stocktake page.

Global carbon dioxide (CO2) emissions from energy combustion and industrial processes[1] grew 0.9% or 321 Mt in 2022 to a new all-time high of 36.8 Gt. This estimate is based on the IEA's detailed region-by-region and fuel-by-fuel analysis, incorporating the latest official national statistics and publicly available data on energy use, economic indicators, and weather.
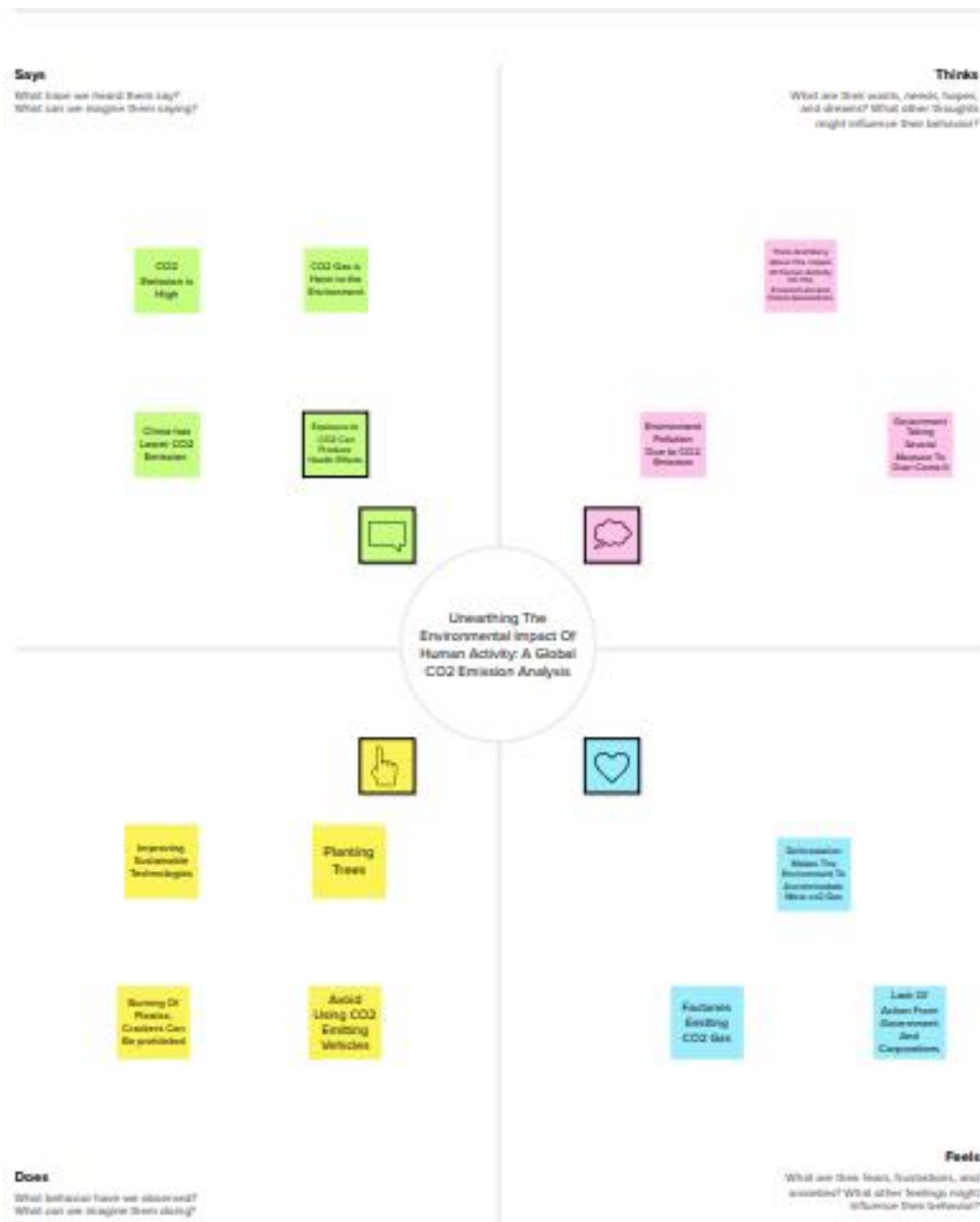
Last year's increase follows two years of exceptional oscillations in energy-related emissions. Emissions shrank by more than 5% in 2020, as the Covid-19 pandemic cut energy demand. In 2021, emissions rebounded past pre-pandemic levels, growing more than 6% in tandem with economic stimulus and the roll-out of vaccines.

CHAPTER - 2

PROBLEM DEFINITION & DESIGN THINKING

2.1. EMPATHY MAP :

- An Empathy Map is a tool used to help understand and empathize with the perspective of a particular user or customer. It is a visual representation of the user's attitudes, behaviours, emotions, and experiences that can be used to gain a deeper understanding of their needs and motivations. The Empathy Map is typically divided into **four quadrants**: **"Says," "Thinks," "Does,"** and **"Feels."** In each quadrant, the user's thoughts, feelings, actions, and spoken words are recorded to help build a more complete understanding of their perspective. The Empathy Map is often used in design thinking and user experience research to help inform the design of products or services that better meet the needs of the user.

Says
What have we heard them say?
What can we imagine them saying?

Thinks
What are their wants, needs, hopes, and dreams? What other thoughts might influence their behavior?

CO2
Emission Is
High

CO2 Gas Is
Here In the
Environment

China Has
Lower CO2
Emission

Exposure to
CO2 Can
Produce
Health Effects

There Is Worry
about the Impact
of Human Activity
On the
Environment and
Future Generations

Environment
Pollution
Due to CO2
Emission

Government
Taking
Several
Measures To
Overcome It

Unearthing The
Environmental Impact Of
Human Activity: A Global
CO2 Emission Analysis

Improving
Sustainable
Technologies

Planting
Trees

Sustainable
Makes The
Environment To
Accommodate
More oil Gas

Burning Of
Plastics,
Crackers Can
Be prohibited

Avoid
Using CO2
Emitting
Vehicles

Features
Emitting
CO2 Gas

Lack Of
Action From
Government
And
Corporations

Does
What behavior have we observed?
What can we imagine them doing?

Feels
What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?

2.2. IDEATION & BRAINSTORMING MAP :

- **Ideation and Brainstorming Maps are tools used to generate and organize ideas in a structured and visual way. They are commonly used in creative problem solving, innovation, and product design to generate a large number of ideas and then organize them into meaningful categories.**

- **Ideation and Brainstorming Maps typically start with a central theme or problem statement in the centre of the map. From there, branches are drawn out to represent different categories or subtopics related to the central theme. These categories can then be further expanded with additional branches to represent specific ideas.**
- **The purpose of an Ideation and Brainstorming Map is to encourage free thinking and generate as many ideas as possible. It allows participants to visually see how ideas are connected and to build upon each other's ideas. The map can then be used to prioritize and refine the most promising ideas. There are many variations of Ideation and Brainstorming Maps, including Mind Maps, Spider Maps, and Fishbone Diagrams.**

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

Importance

Feasibility

Group Ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

- China's emissions Are Likely To Increase By Almost 900 mt CO2
- Emissions Increased By Almost 21 Gt From 2020 Levels
- Planting Trees
- Identification Of The Major Sources Of CO2 Emissions
- Makes Environment Risk Free
- Can Improved Human Average Life Span
- Government Measures Audit Us Using Bike Friendly Bags Is A Great Way To Overcome It
- Encouraging Private And Governments
- Improving Sustainable Technologies
- Avoid Using CO2 Emitting Vehicles
- Burning Of Plastics, Crackers Can Be Prohibited
- Comfortable To Live

Brainstorm

Write down any ideas that come to mind that address your problem statement.

CHAPTER – 3

DATA COLLECTION & EXTRACTION FROM DATABASE IN MYSQL

3.1.: Collect the dataset :

- Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, evaluate outcomes and generate insights from the data.

3.1.1 : Understand the data :

- Data contains all the meta information regarding the columns described in the CSV files

Column Description of the Dataset:

Typically, a CO_2 emission dataset would contain the following columns:

- Country: The name of the country or region from which the CO_2 emissions data was collected.
- Year: The year or years for which CO_2 emissions data is available.
- CO2 Emissions: The amount of carbon dioxide emitted by a country or region, usually measured in metric tons per capita or per unit of GDP.
- CO2 Emissions (per capita): The amount of carbon dioxide emitted per person in a country or region, usually measured in metric tons.
- CO2 Emissions (per GDP): The amount of carbon dioxide emitted per unit of GDP in a country or region, usually measured in metric tons per million dollars of GDP.
- Share of Global CO2 Emissions: The percentage of global CO_2 emissions contributed by a country or region.
- Population: The total population of a country or region for the year in question.
- GDP: The total gross domestic product of a country or region for the year in question, usually measured in US dollars or the local currency

.

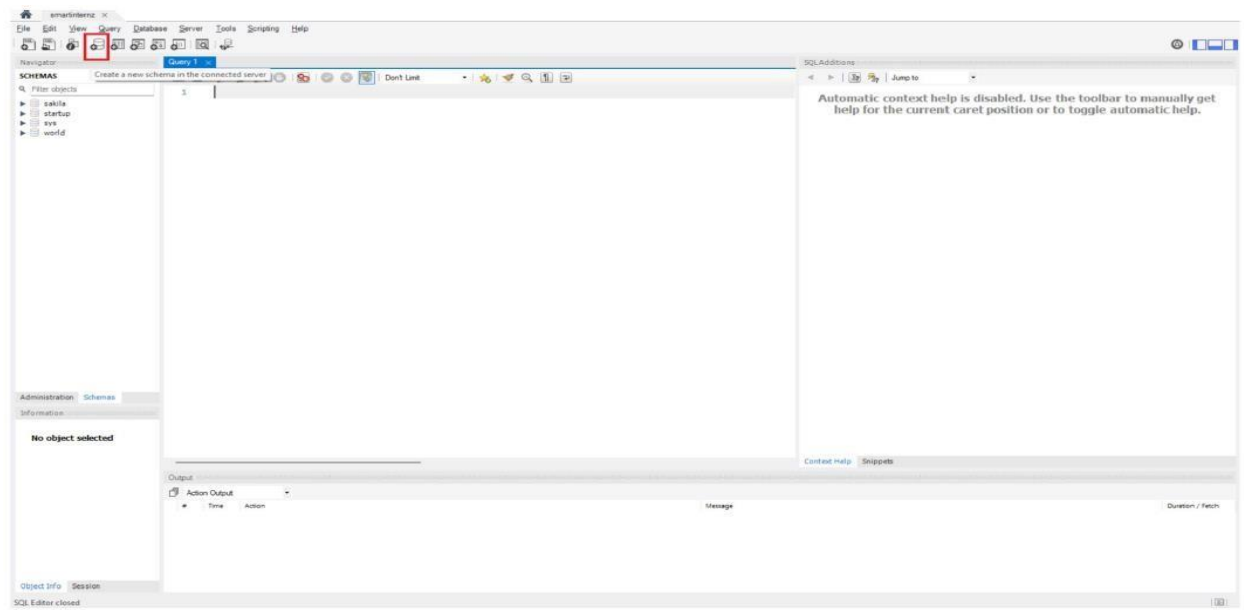## 3.2: Storing Data in DB & Perform SQL Operations :
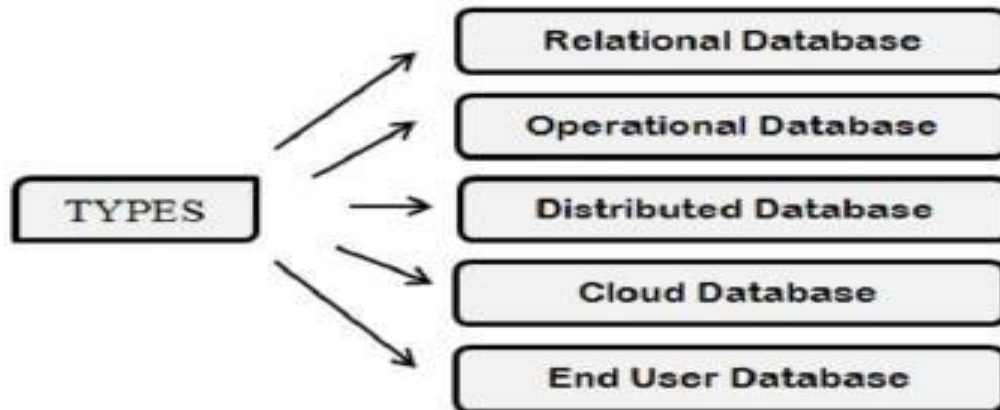
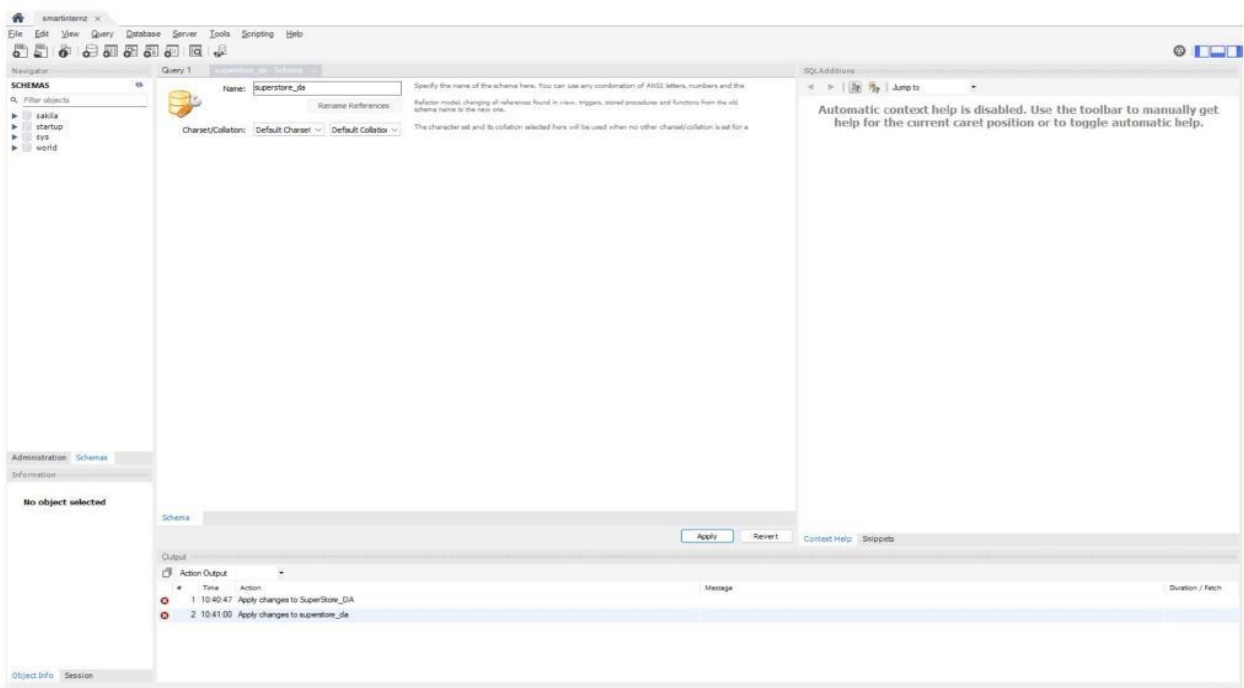## 3.2.1. : Introduction to Database :

Its ability to organize, process and manage information in a structured and controlled manner is the key to many aspects of modern business efficiency.

3.2.2.: Creating Database and Table in MySQL :

- Click on the database icon on the icon menu panel to create the schema.

Give the name of the schema and click on apply

- Here you can see SQL query in SQL script for creation of new schema. Click on Apply.
- As you can see of the left panel Schema with the given name is created.
- Click on schema name and give a Right-Click on tables

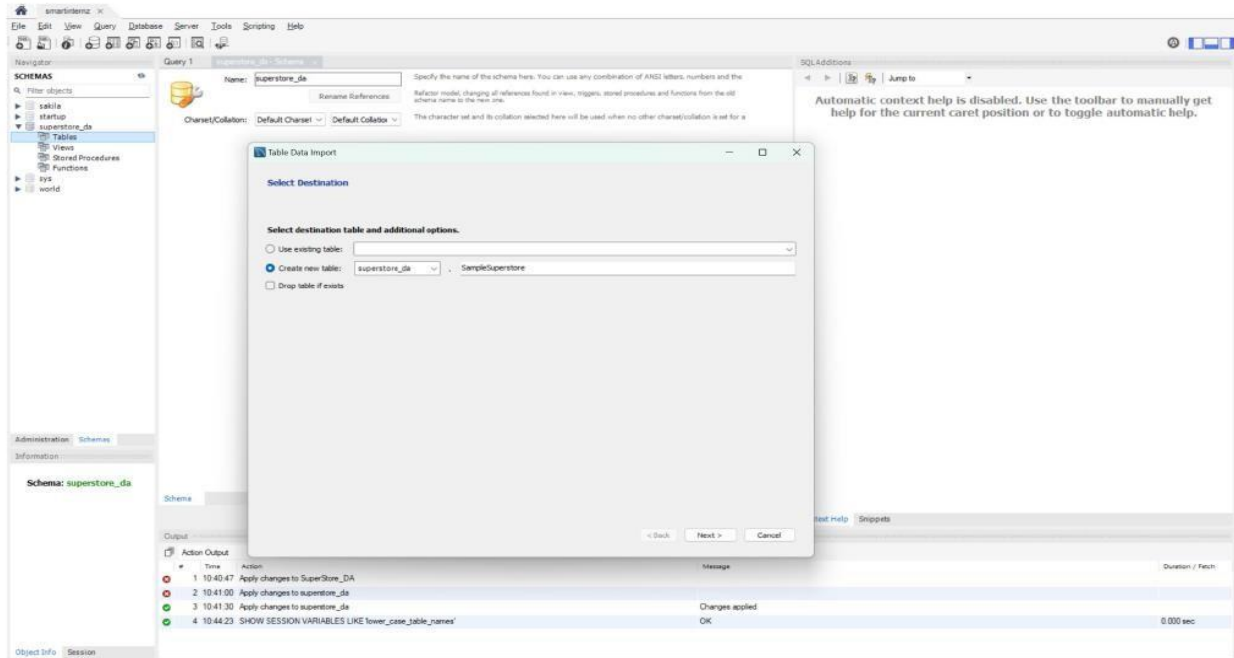- Now click on Table Data Import Wizard to load the dataset.
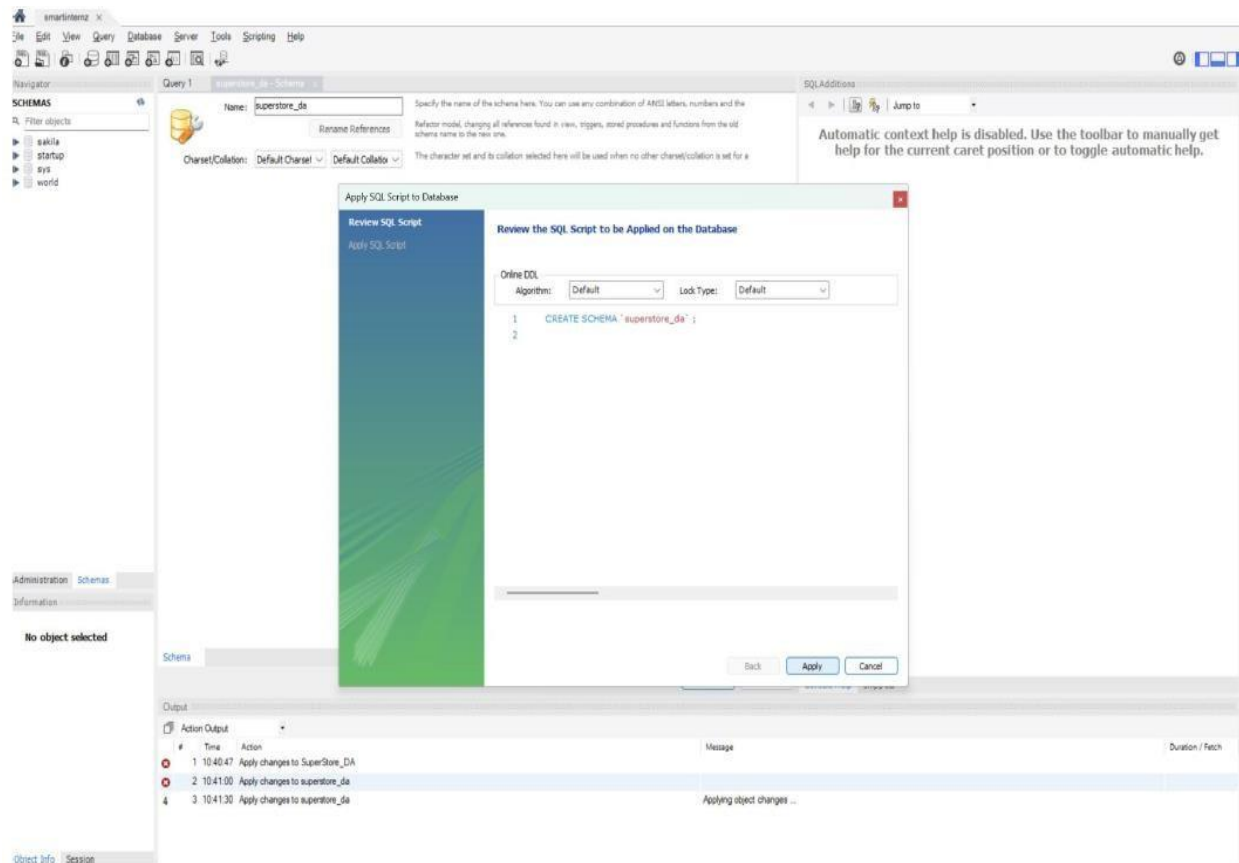
➕ Click on Browse and select the file in your computer to load the dataset file as a Table into that schema you created in MySQL.
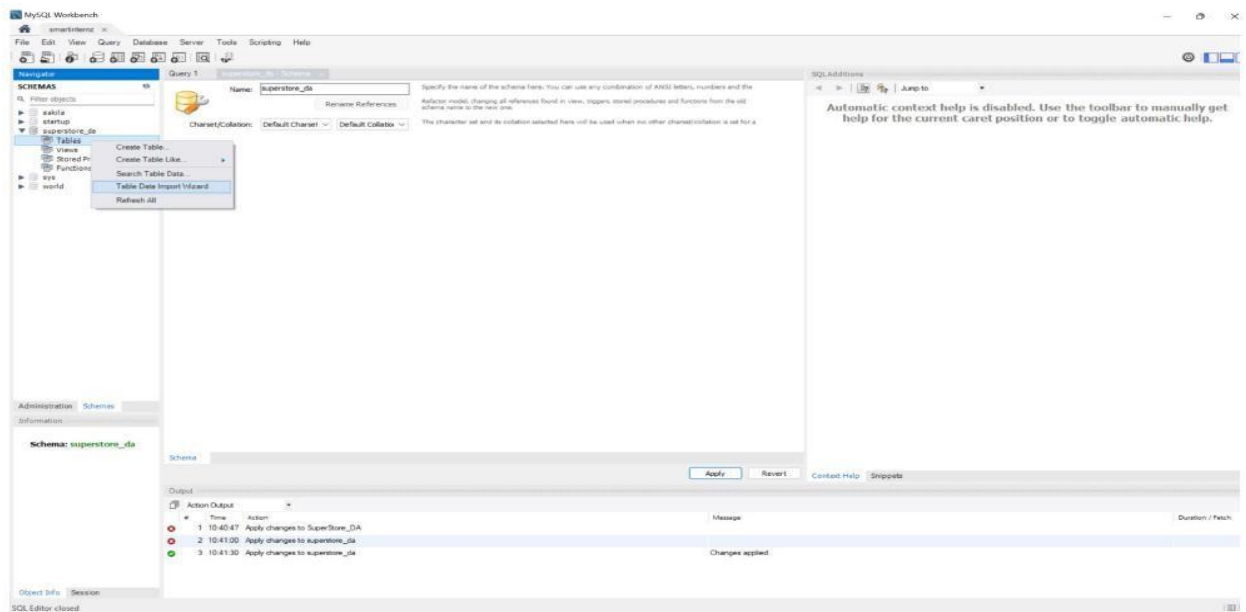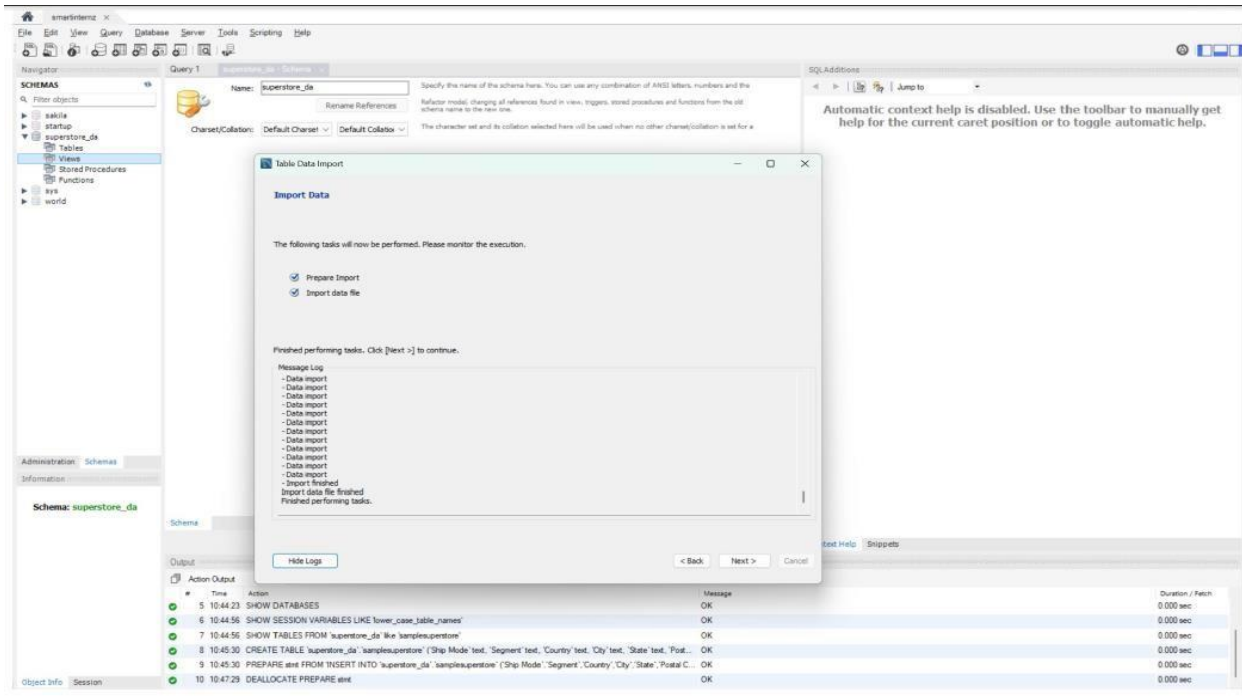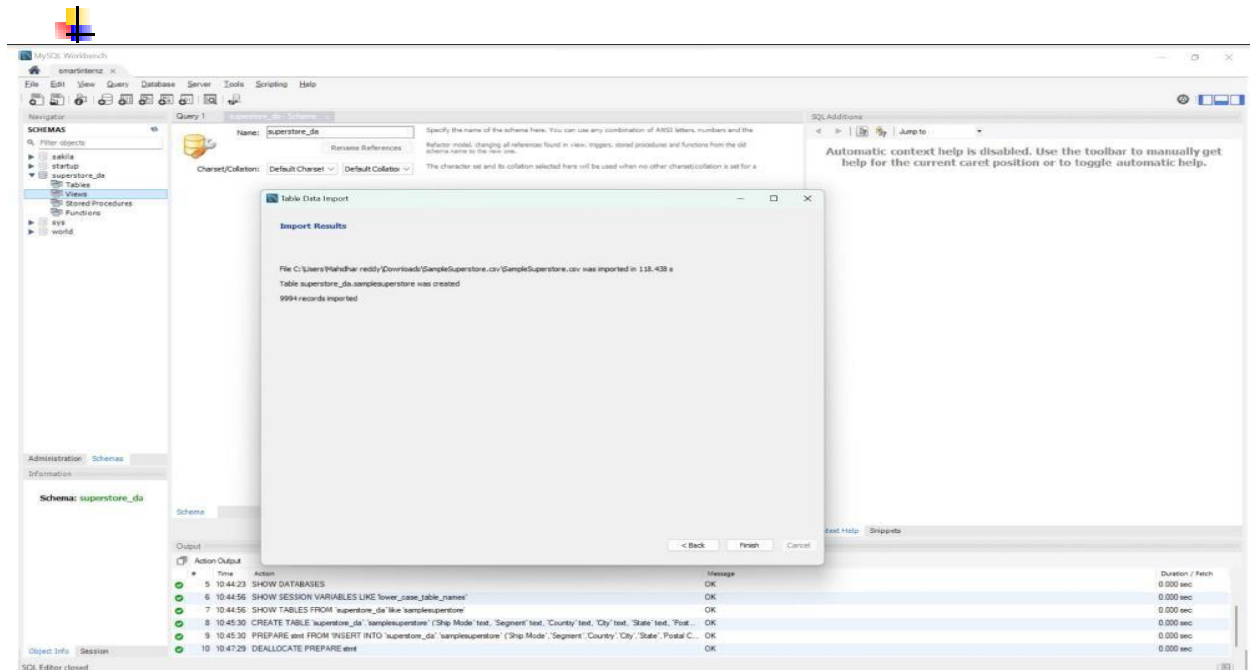

• If you want add the dataset to existing table click on use existing table and select from the dropdown of tables lists.

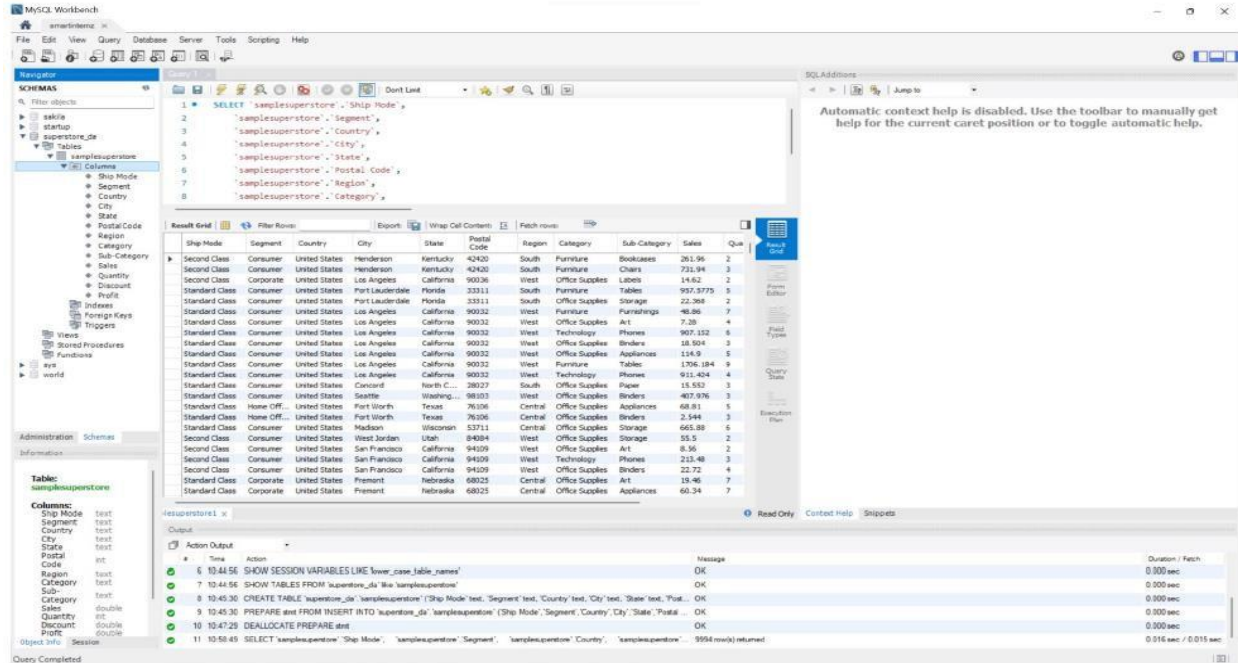➕ Otherwise go with create new table and Click on **Next.**
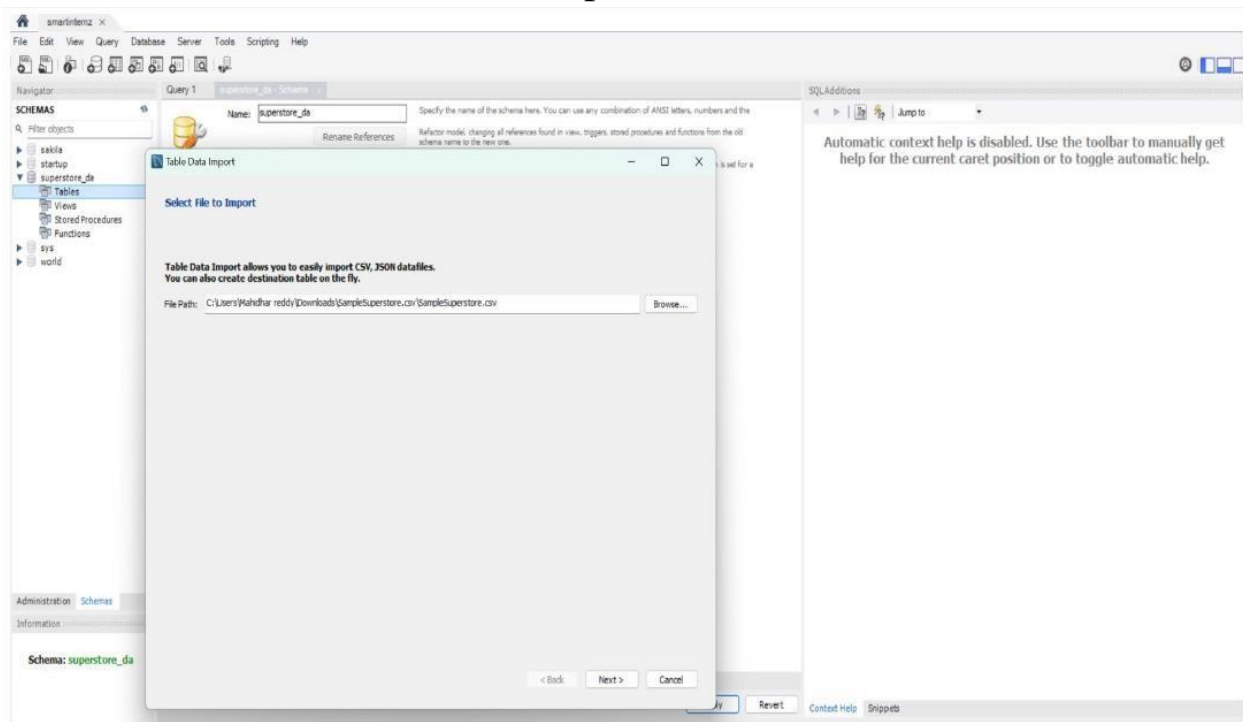
- Here you can see the dataset that loaded from the excel/csv file we have loaded and you can see the datatype of each column too.
- Here you can see the total number of records/rows that are loaded.

Here you can see the loaded dataset that we got by using select statement in query tab.

3.2.3 : CRUD Operations :

To get this goto Columns in you dataset on left panel and give Right Click and select send to SQL Editor and select SELECT ALL Statements.

CRUD is an acronym for CREATE, READ(SELECT), UPDATE, and DELETE statements in SQL Server.

CRUD in database terms can be mentioned as Data Manipulation Language (DML) Statements.

3.2.4 : Basic SQL Operations :

- DDL – Data Definition Language
- DQL – Data Query Language
- DML – Data Manipulation Language
- DCL – Data Control Language
- TCL – Transaction Control Language
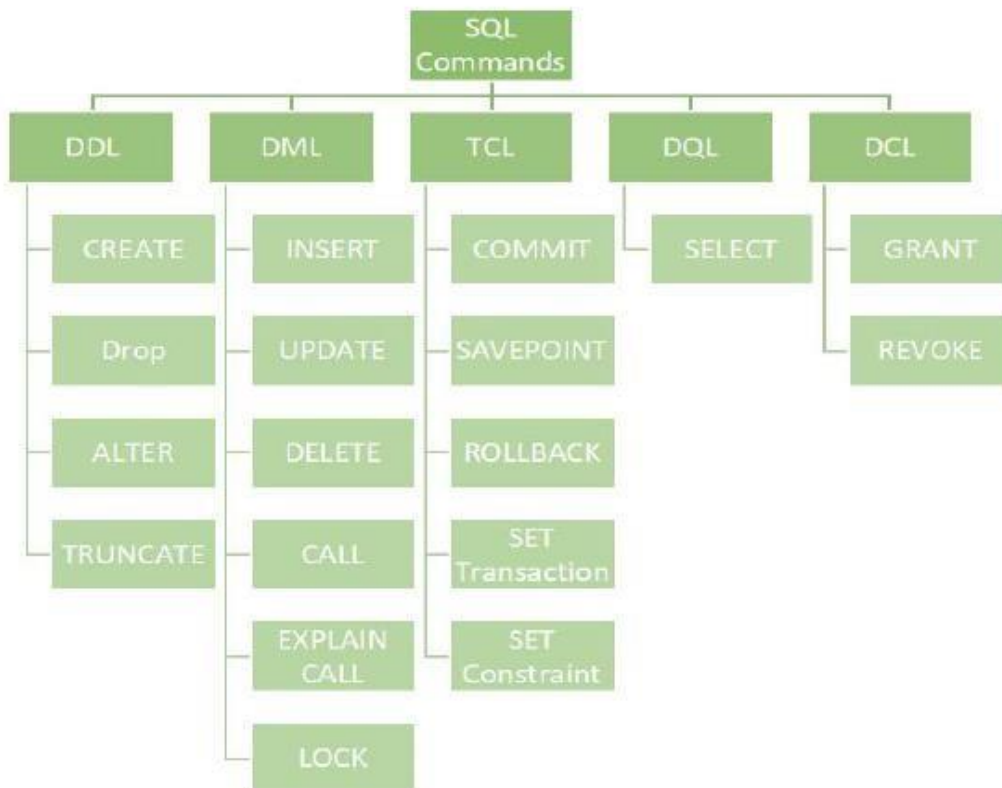
CHAPTER-4

INTRODUCTION TO TABLEAU

4.1.: What is Tableau?

- Tableau is a ground breaking data visualization software created by Tableau Software.
- Tableau connects easily and nearly any data source.

- Tableau allows for instantaneous insight by transforming data

into interactive data visualizations called dashboards
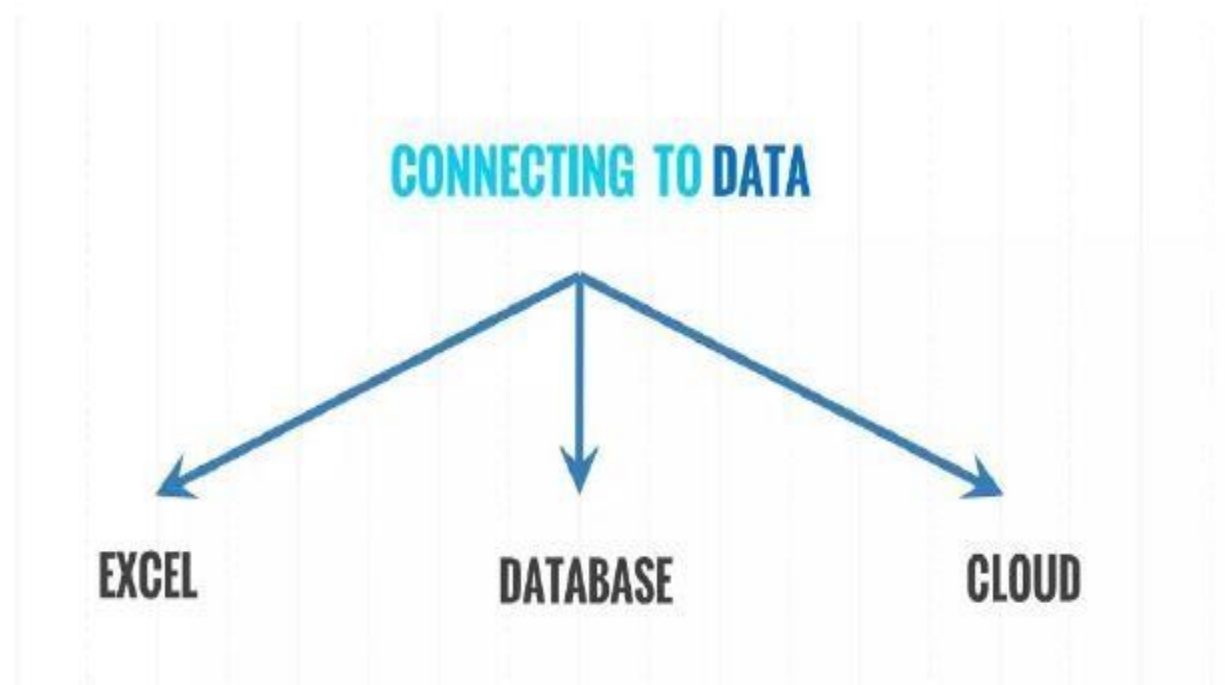
4.2.:Features of Tableau :

- Informative Dashboards
- Supports numerous Data Sources
- Provides Great Security
- Easy Collaboration & Sharing
- Provides Mobile Version
- Trend lines and Predictive analysis
- Availability of Geo Maps

4.3.: Products of Tableau :

- Tableau Public

- Tableau Server

- Tableau Desktop

4.4.:Connecting Tableau with Data Sources :

4.5:Working with Flat files :

co2 new (co2_project) (2)

Connection		Filters
⦿ Live ⚪ Extract		0 ｜ Add

co2 new

Need more data?
Drag tables here to relate them. Learn more

| co2 new ▾ | 20 fields 9192 rows | | | 100 → rows ⚙ ⌄ |

⊕ co2 new Country	# co2 new Year	# co2 new Co2	# co2 new Co2 Growth Prct	# co2 new Co2 Per Capita	# co2 new Cumulative Co2
Afghanistan	1975	2.12	10.880	0.16700	21
Afghanistan	1976	1.98	-6.620	0.15300	23
Afghanistan	1977	2.38	20.360	0.18100	25
Afghanistan	1978	2.15	-9.680	0.16100	27
Afghanistan	1979	2.23	3.690	0.16600	30

Name
co2 new

Fields

Type	Field Name	Physical Table	Remote Fie...
⊕	Country	co2 new	country
#	Year	co2 new	year

ive Co2 And Co2 per ... | Co2 Emission in 2020 | China vs India Internal Factors | Overall Contribution by China in ... | ⊞ Dash1 | ⊞ Dash2 | ⊞ Dash3 | Ⓤ Co2 Emission Story

- In the To a File section you can see the list of file extensions.

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- In the below you can see more option if the list of your file extension is not there.

4.5.:Working with the Spreadsheets :

- Tableau enables us to connect with spreadsheets to import the data.

CHAPTER - 5

CONNECTING DATABASE AND TABLEAU

5.1.: Connecting Database and Tableau :

- Before you begin your analysis, you must connect to your data and then set up the data source.
- Before you can build a view and analyse your data, you must first connect Tableau to your data.
- Tableau supports connecting to a wide variety of data, stored in a variety of places.
- For example, your data might be stored on your computer in a spreadsheet or a text file, or in a big data, relational, or database on a server in your enterprise.
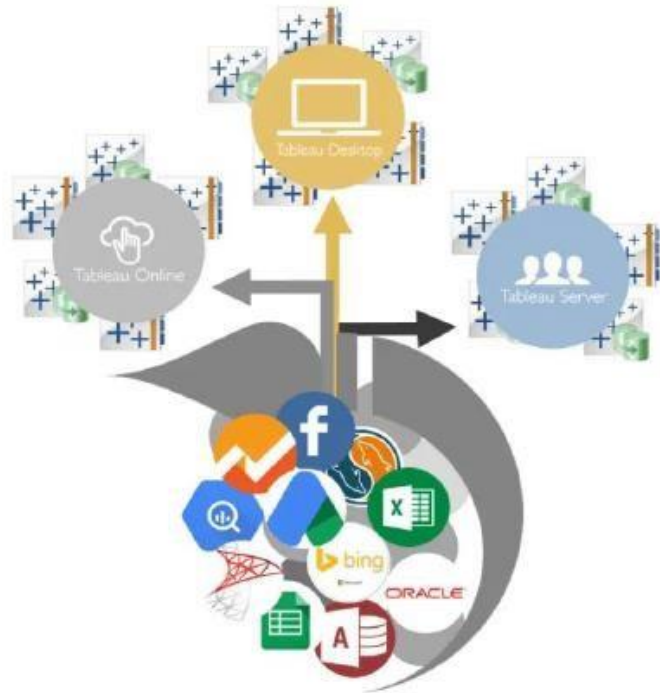
5.2.: List of Data Sources Supported by Tableau Desktop :

- When you launch Tableau Desktop, the data connectors that are available to you are listed on the Connect pane, which is the left pane on the Start page.
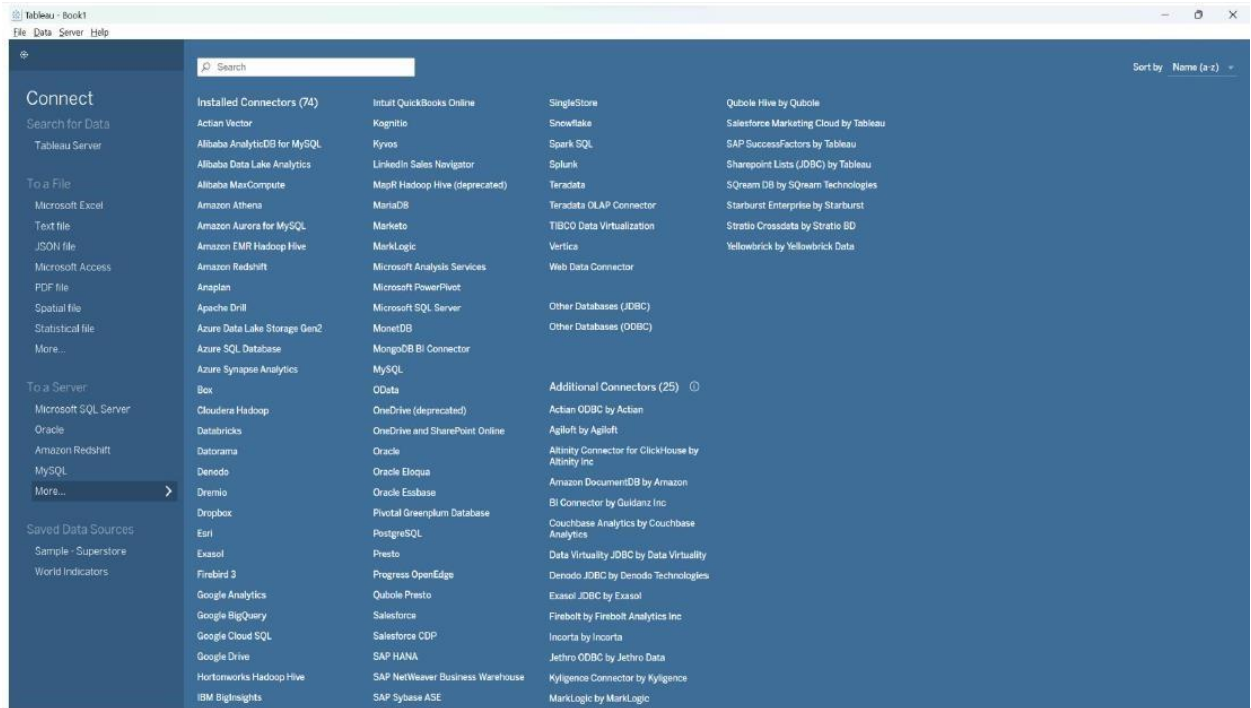
- Name of the server that hosts the database you want to connect to.
- Username and password
- Are you connecting to an SSL server?
- (Optional) Initial SQL statement to run every time Tableau connects. If the connection is success you can see this page.

Now you can go to sheets and start working on the dataset to create Visualizations.

CHAPTER – 6

DATA VISUALIZATION

6.1.: What is Data Visualization…??

- Data visualization is the graphical representation of information and data. By using visual elements like chart, graph and maps.

- Data visualization tools provide an accessible way to see and understand trends,

outliers, and patterns in data.

Advantages :

- Easily sharing information.

- Interactively explore opportunities.

- Visualize patterns and relationships.

6.2 : Types of Visualization in Tableau :

i	Histograms	vi	Box plot
ii	Motion	vii	Pie
iii	Bar	viii	Line
iv	Bubble	ix	Bullet
v	Scatter	x	Tree

CHAPTER - 7

<u>DASHBOARD AND STORIES</u>

7.1.: Creating a Dashboard in Tableau :

- A dashboard is a collection of different kinds of visualizations or views that we create on Tableau We can bring together different elements of multiple worksheets and put them on a single dashboard.
- The dashboard option enables us to import and add charts and graphs from worksheets to create a dashboard. On a dashboard, we can place relevant charts and graphs in one view and analyse them for better insights.
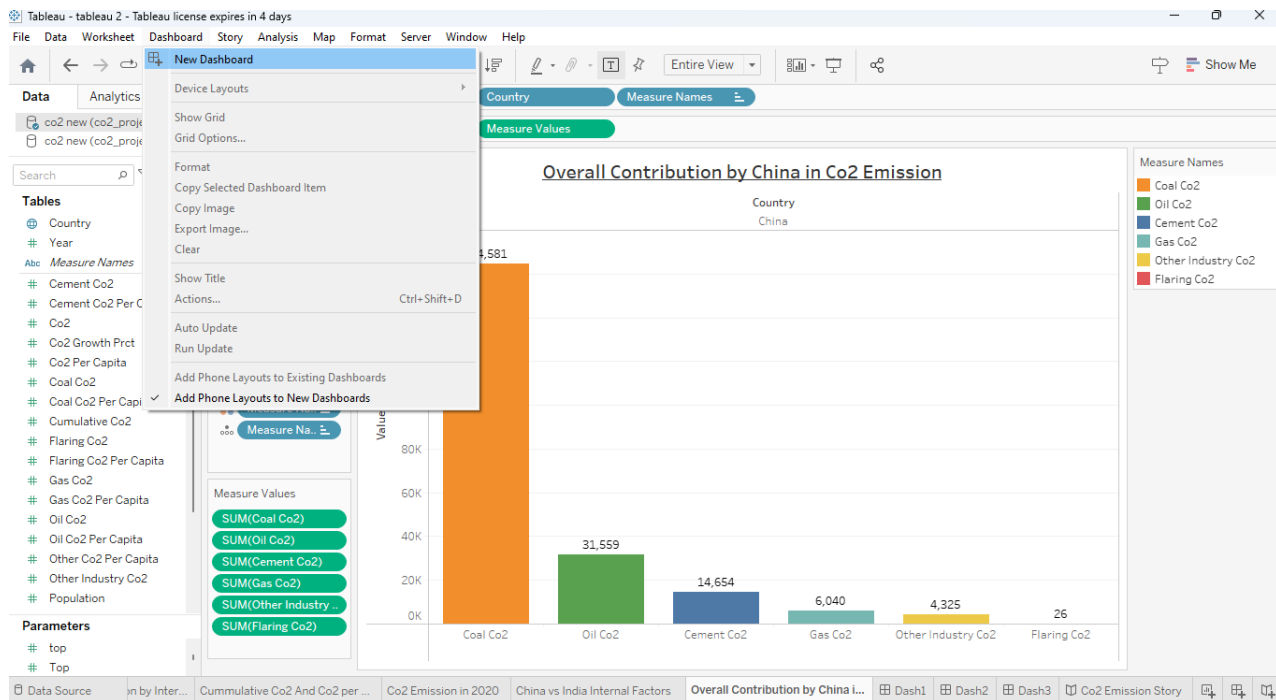
.1.1.: Dashboard Pane :

- In the window where we can create our dashboard, we get a lot of tabs and options related to dashboarding. On the left, we have a Dashboard pane which shows the dashboard size, list of available sheets in a workbook, objects, etc.
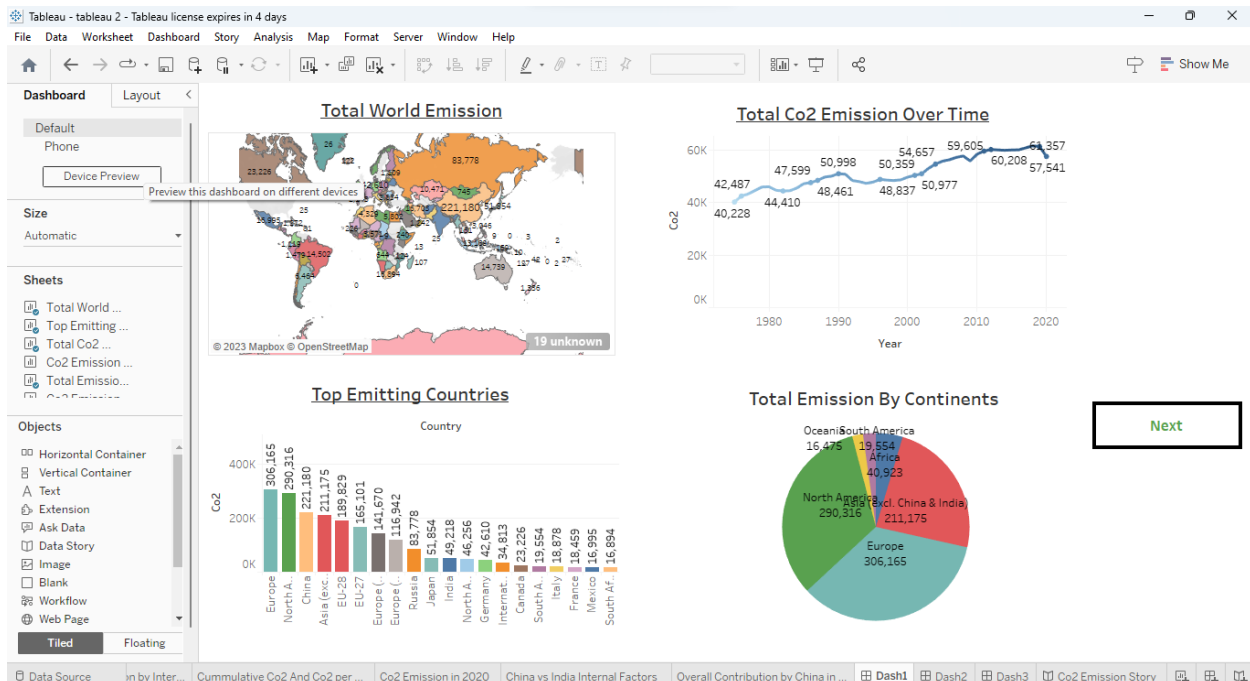
- From the Dashboard tab, we can set the size of our dashboard. We can enter custom dimensions like the width and height of the dashboard as per our requirements.

.1.2.: Adding Sheets :

- Have a look at the picture below to see how you can drag a sheet or visual around on the dashboard and adjust its size.
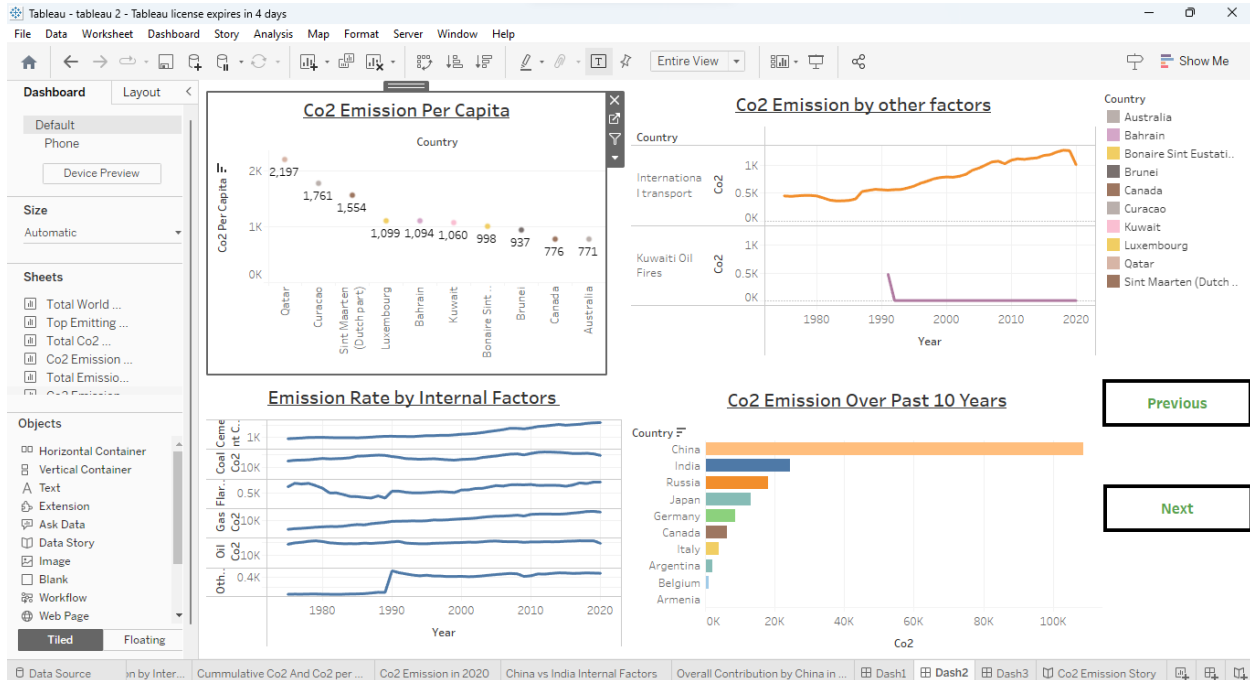
7.1.3.: Adding More sheets in dashboard :

- In a similar way, we can add as many sheets as we require and arrange them on the dashboard properly.

.1.4.: Filters in dashboard :

- Also, you can apply the filter or selections on one graph and treat it like a filter for all the other visuals on the dashboard.
- To add a filter to a dashboard in Tableau, select Use as Filter option given on the right of every visual.
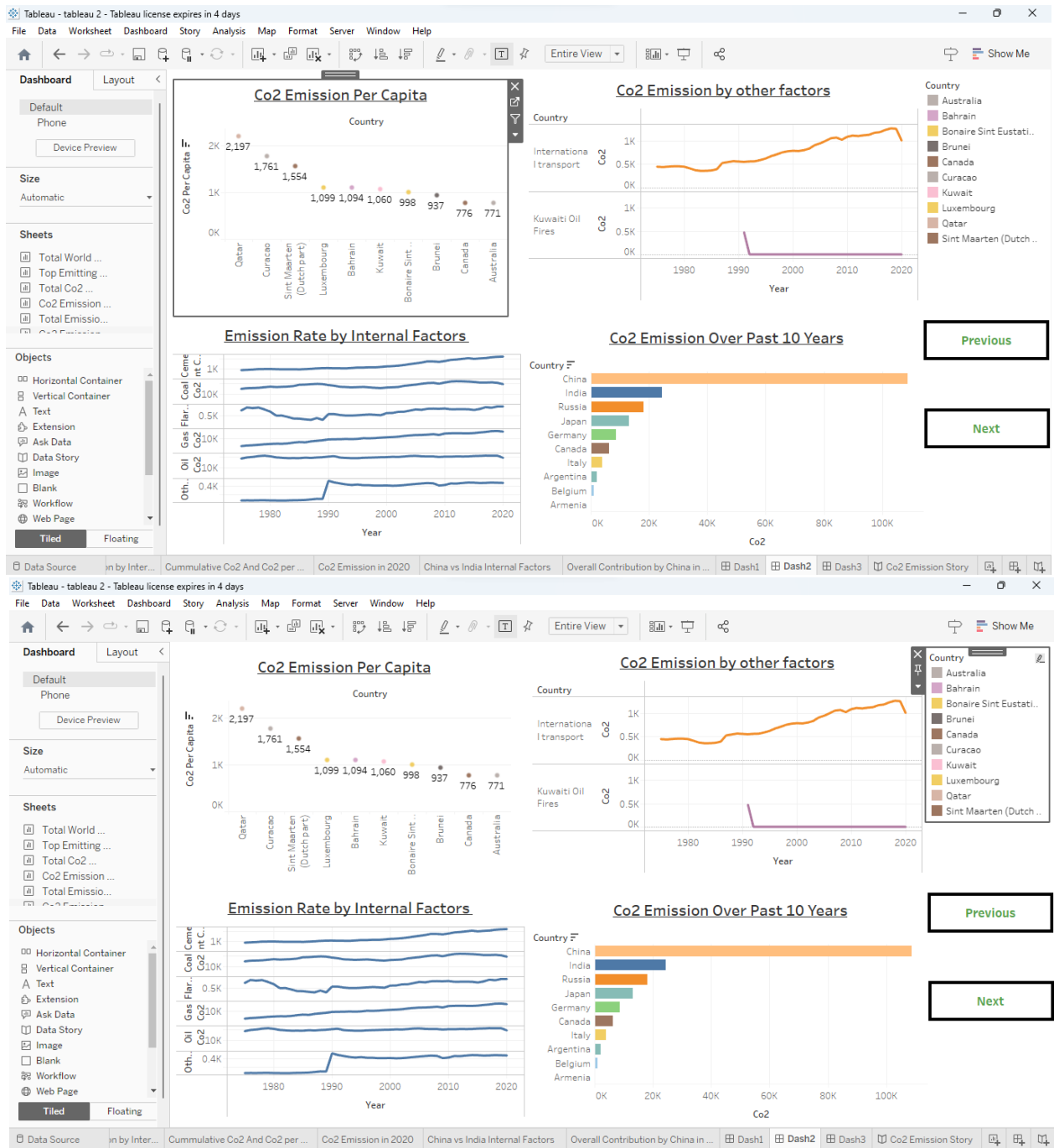
.1.5.: Adding objects :

- Another set of tools that we get to make our dashboard more interactive and dynamic is in the Objects section. We can add a wide variety of objects such as a web page, button, text box, extension, etc.
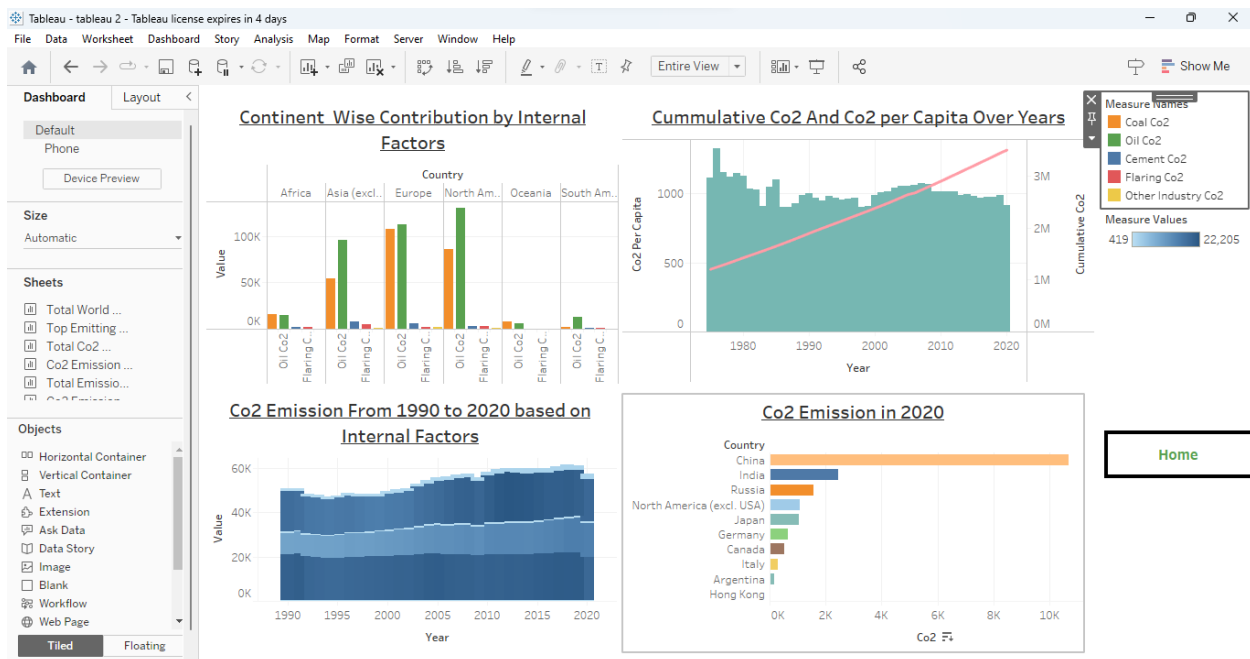
- From the objects pane, we can add a button and also select the action of that button, that is, what that button should do when you click on it. Select the Edit Button option to explore the options you can select from for a button object.
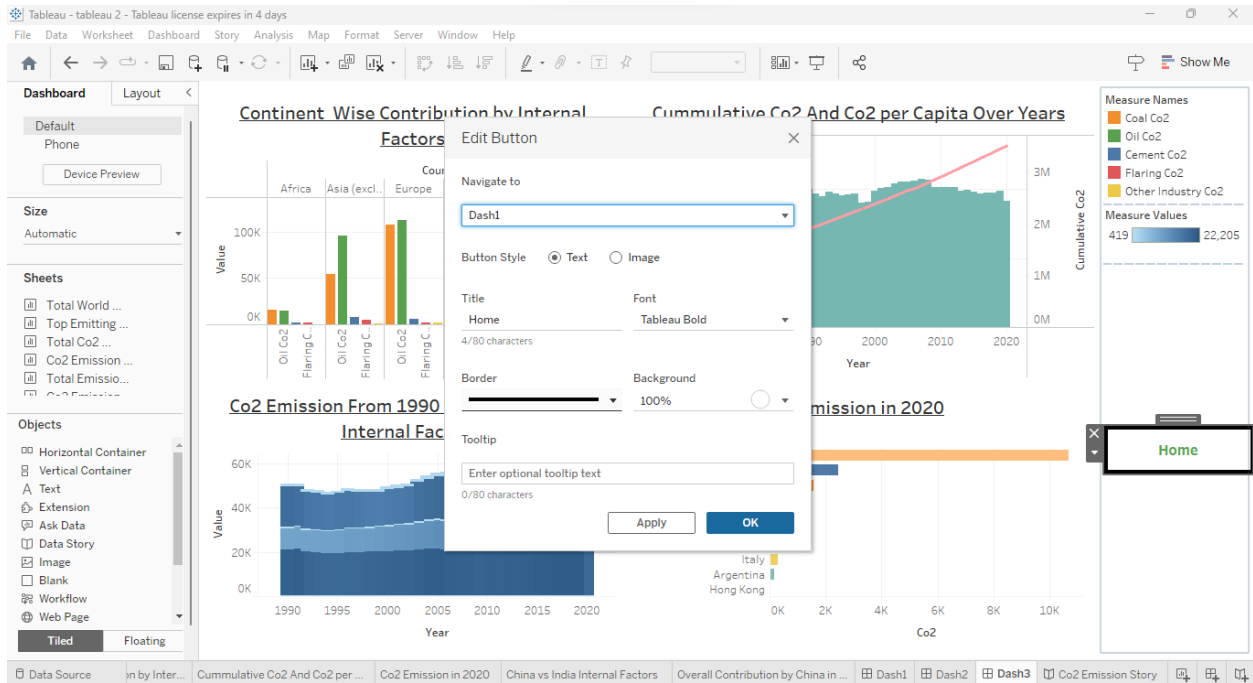
.1.6.: Final Dashboard :

- Now, we move towards making a final dashboard in Tableau with all its elements in place

Total World Emission

Total Co2 Emission Over Time

Top Emitting Countries

Total Emission By Continents
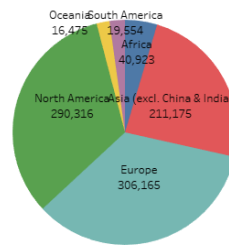
Next

Co2 Emission Per Capita
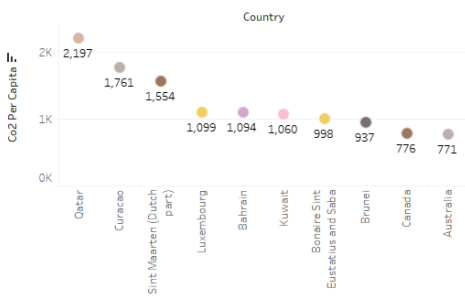
Co2 Emission by other factors
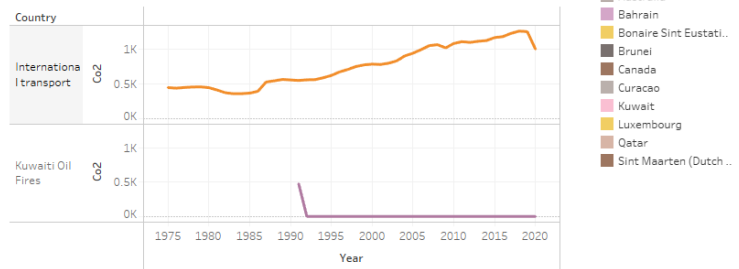
Emission Rate by Internal Factors
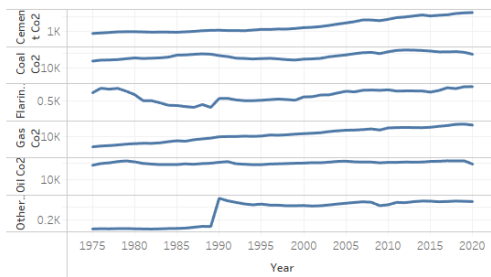
Co2 Emission Over Past 10 Years
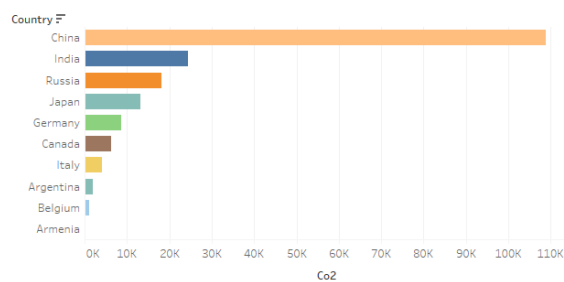
Previous

Next
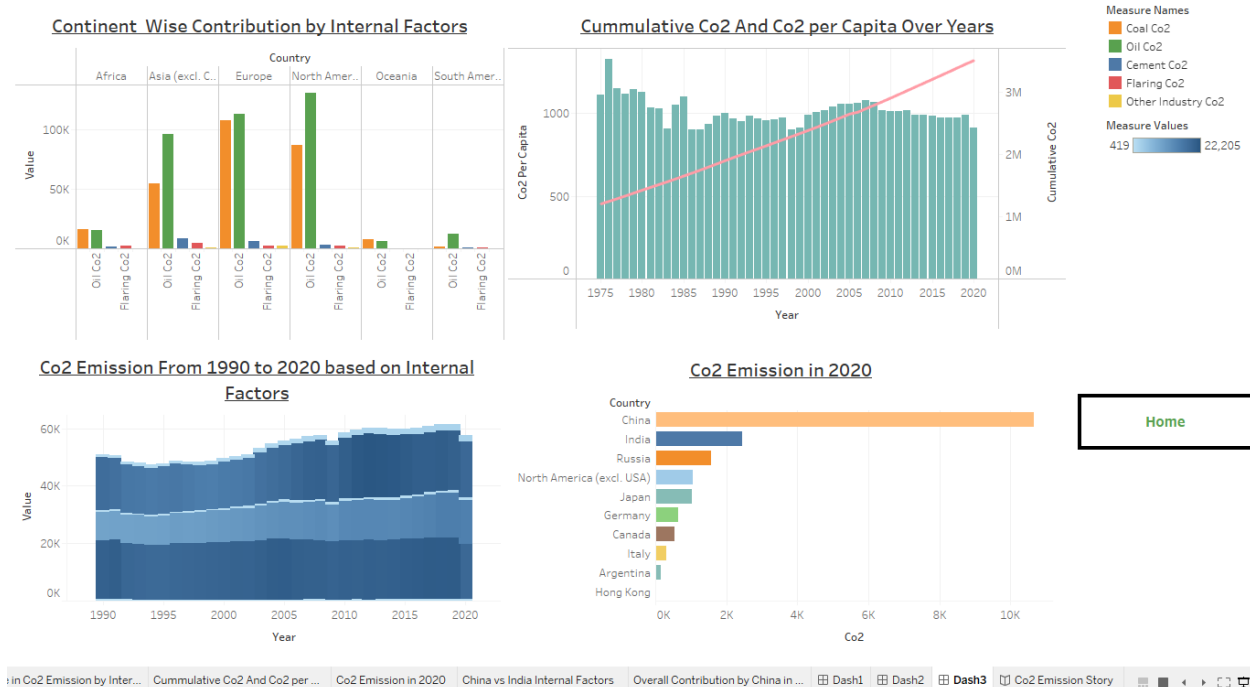
.2.: What are Tableau Stories?

● Well, it is a sequence of different charts that combine to provide a cohesive plot to its viewers. In essence, all these charts tell a story about the data which allows the viewers to form their conclusion. The story in Tableau contains story points, where each story point is either a worksheet or a dashboard.

● When you share a story —for example, by publishing a workbook to Tableau Public, Tableau Server, or Tableau Cloud— users can interact with the story to reveal new findings or ask new questions of the data.

- **Options for adding a new story point:** Choose **Blank** to add a new point or **Duplicate** to use the current story point as the starting place for your next point.

- **The Story pane:** Use this pane to drag dashboards, sheets, and text descriptions to your story sheet. This is also where you set the size of your story and display or hide the title.

- **The Layout pane:** This is where you choose your navigator style and display or hide the forward and back arrows.

- **The Story menu:** Use this menu in Tableau Desktop to format the story or copy or export the current story point as an image. You can also clear the entire story here or show or hide the navigator and story title.

- **The Story toolbar:** This toolbar appears when you mouse-over the navigator area. Use it to revert changes, apply updates to a story point, delete a story point, or create a new story point out of the current, customized one.

- **The navigator:** The navigator allows you to edit and organize your story points. It's also how your audience will step through your story. To change the style of the navigator, use the Layout pane.
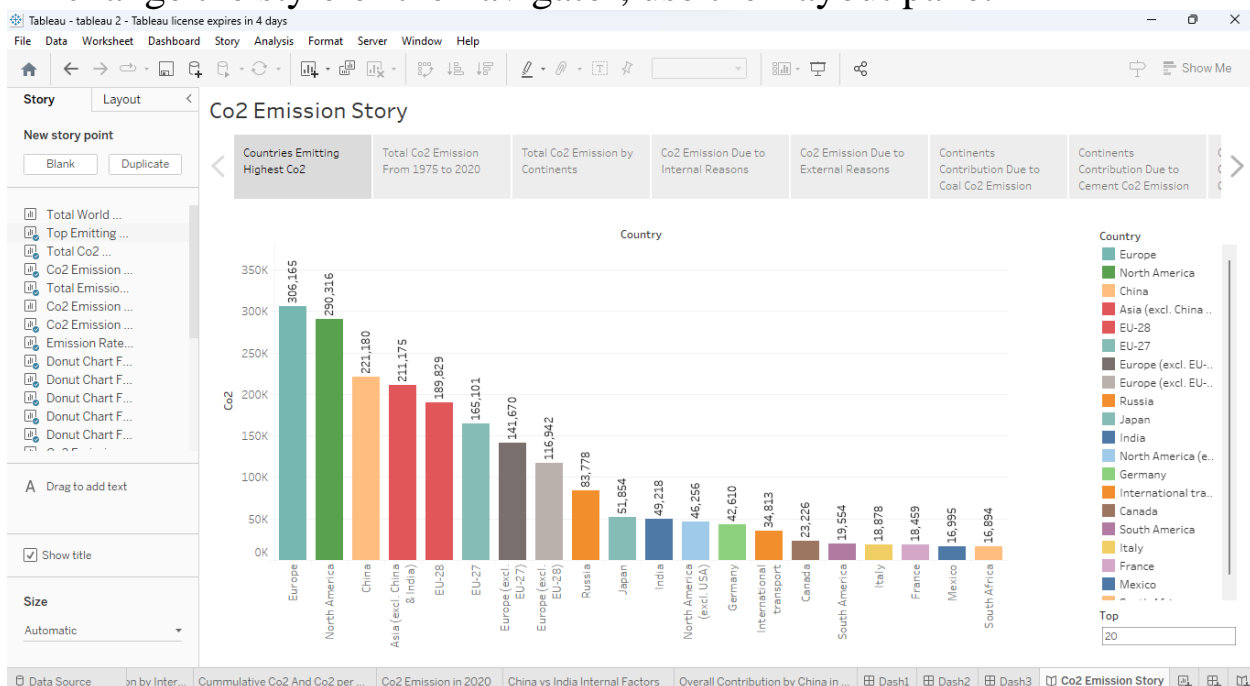
7.2.1.: How to create a Story? .

Step 1:
Click on the new Story tab to create a new story. You
can then add various sheets and dashboards to create a story point.
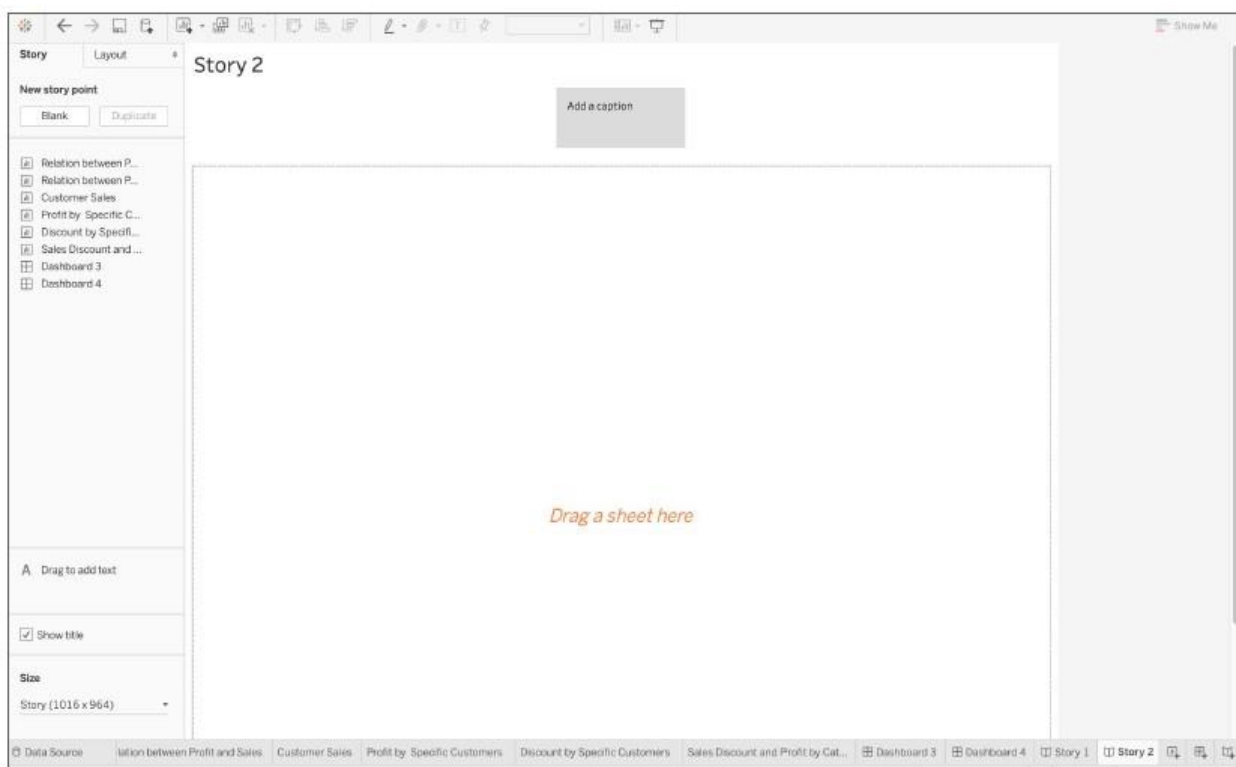
Step 2:

To start building your story, double-click a sheet on the left to feature
it to your story purpose
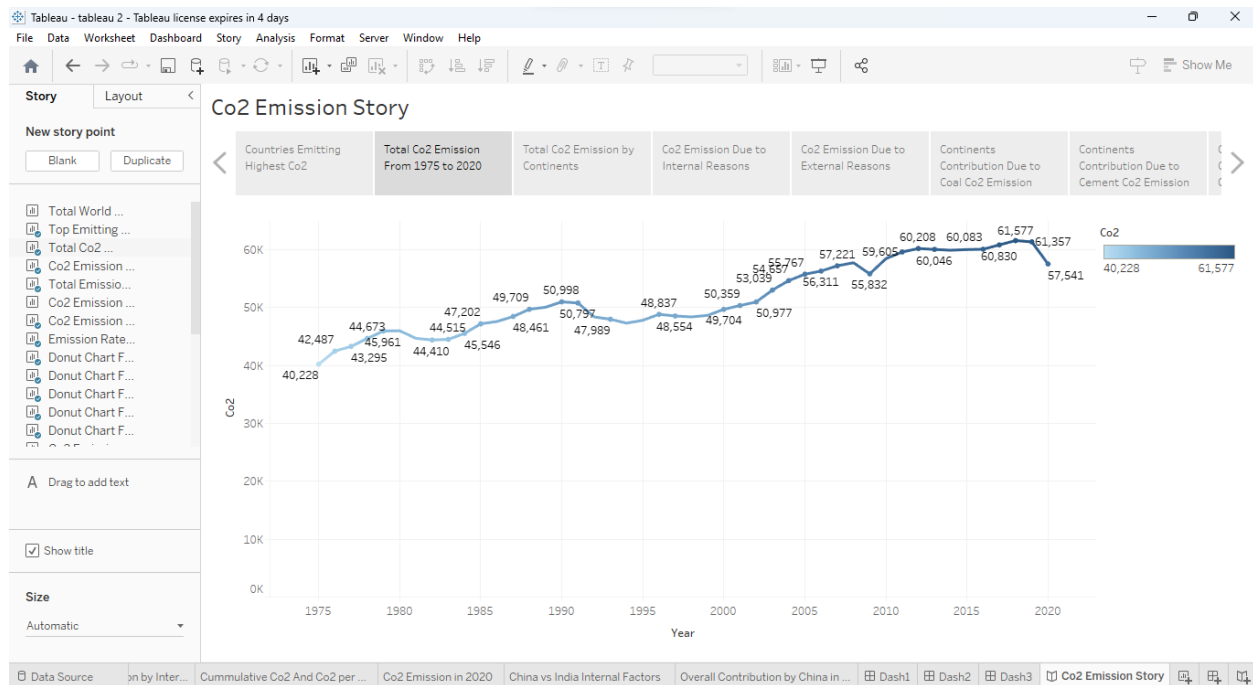
Step 3:

We can also add a caption to summarize the story point by clicking on "Add a caption" and then writing it. Let's add the caption "Relation between Discounted Sales and Profit by Category and Subcategory" to our example.
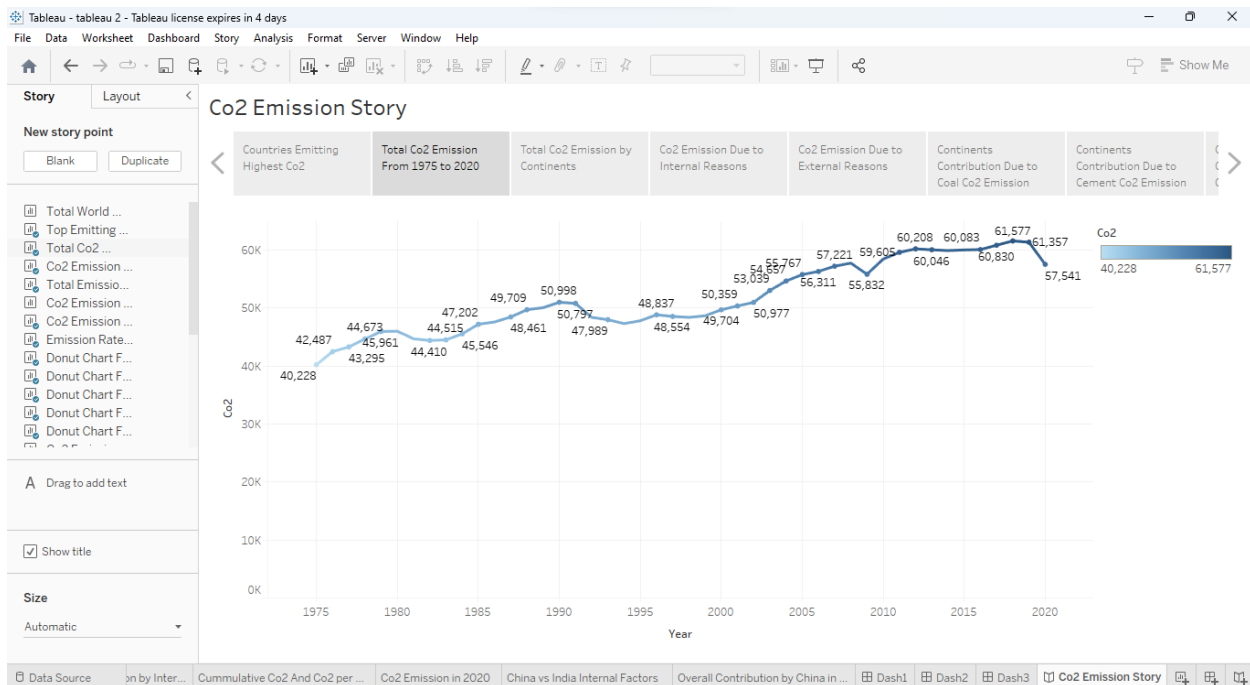
Starting with your next story point, you'll use the drill-down technique in order to narrow down the scope of the story and keep the narrative moving.

1. To use your first story point as a baseline for your next, click Duplicate under New Story point on the left.

You can change the size of your story by clicking on the Size option in the lower-left corner. You can choose from one of the predefined sizes or set your custom size in pixels. You can also change the name of your story by right-clicking on your Story tab and choosing rename.
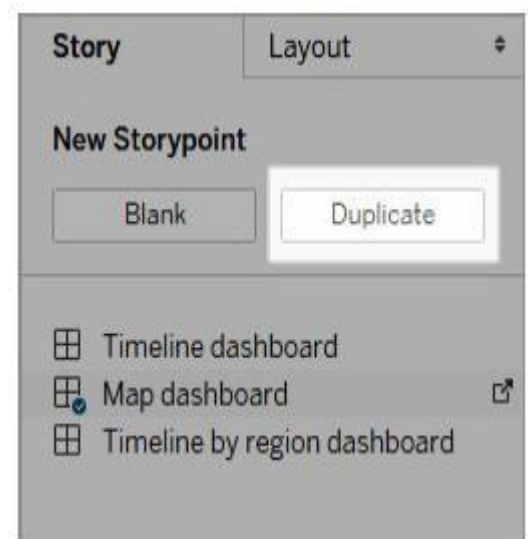
7.2.2.: Final Story :

Examine your work! Take a look at "Finishing touches" in action.

Co2 Emission Story
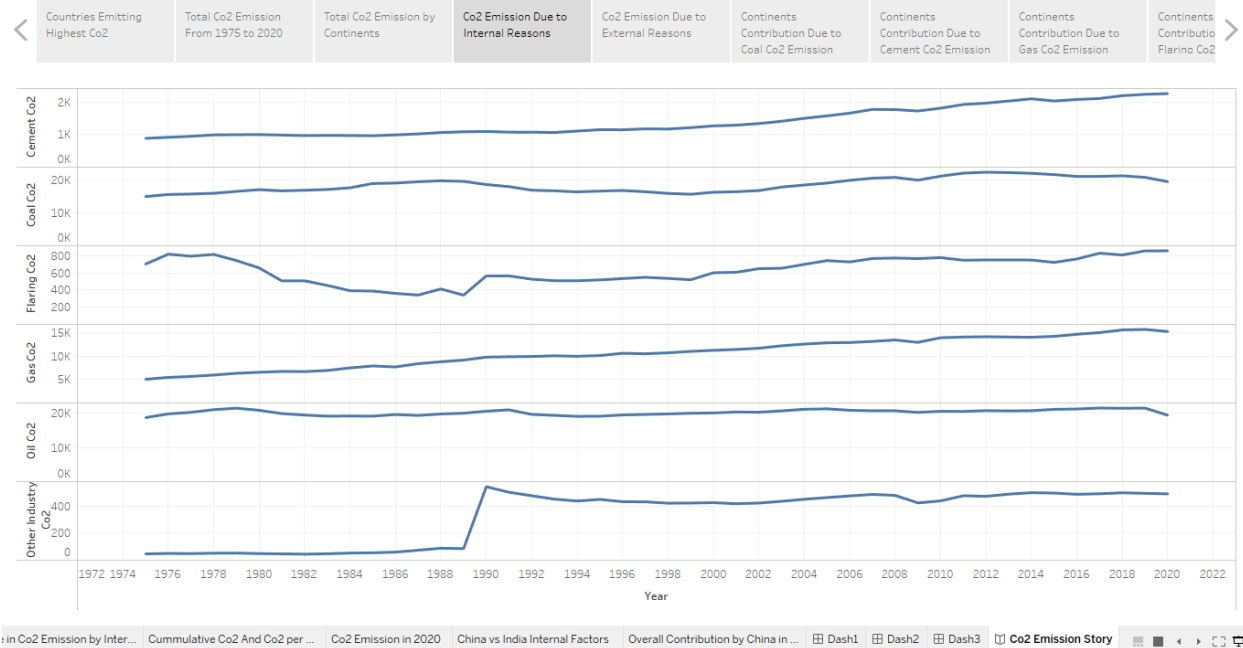
CHAPTER – 8

WEB INTEGRATION

8.WEB INTEGRATION :

- Publishing helps us to track and monitor key performance metrics and to communicate results and progress help a publisher stay informed, make better decisions, and communicate their performance to others.

8.1 : Publishing dashboard and reports to tableau public :

Step 1:

Go to Dashboard/story, click on the share button on the top ribbon Give the server address of your tableau public account and click on connect.
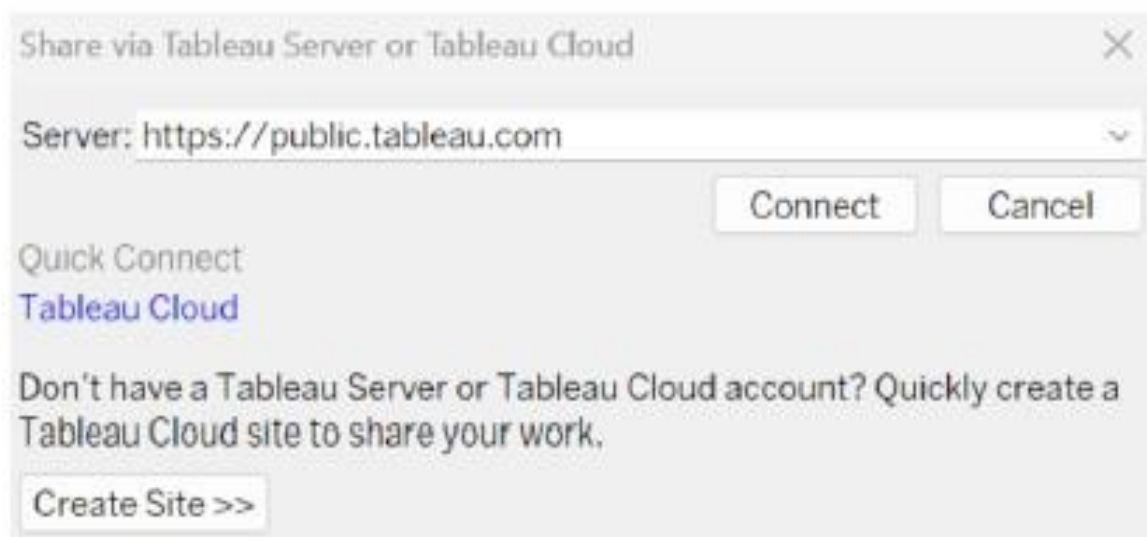
Step 2:

Once you click on connect it will ask you for the tableau public username and password. Once you login into your tableau public using the credentials, the particular visualization will be published into the tableau public

Note: While publishing the visualization to the public, the respective sheet will get published when you click on the share option.

8.2. : Embed Dashboard & Story with Web Bootstrap :

Created the Web Integration : **CO2 Emission** by Sujith And Team
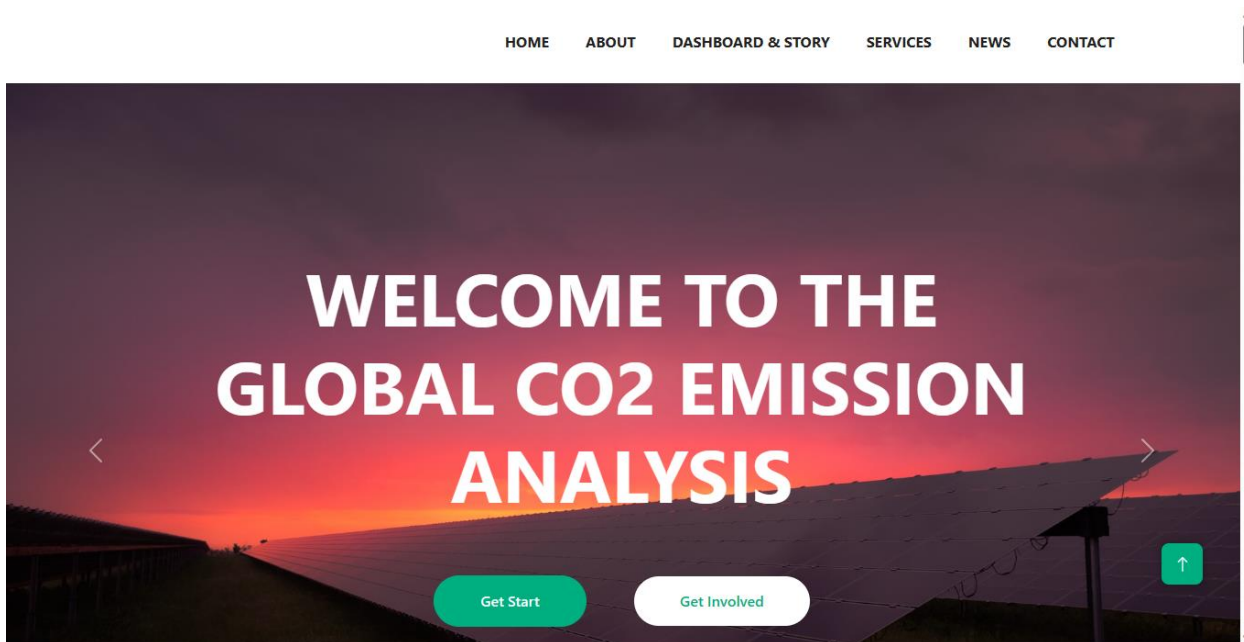
CONTROLLING CO2 EMISSION

Use Natural Resources to Overcome Co2 Emission

Natural resources are important to green infrastructure because they contribute to its development by providing a variety of benefits, such as: drinking water reducing flood risk functioning as a carbon sink (absorbing carbon dioxide) improving air quality, promoting biodiversity supporting recreational activities such as hiking or canoeing
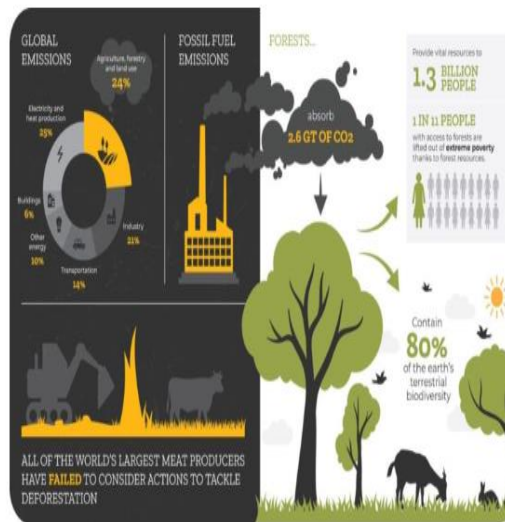
CHAPTER – 9

ADVANTAGES & DISADVANTAGES & APPLICATIONS

9. LIST OF ADVANTAGES AND DISADVANTAGES OF THE PROPOSED SOLUTION :

Advantages:

- Identifying areas for improvement: By analysing CO2 emissions, individuals, companies, and governments can identify areas where emissions are high and take steps to reduce them. This can lead to improved energy efficiency, reduced waste, and lower operating costs.
- Meeting regulatory requirements: Many countries have implemented regulations and laws to reduce CO2 emissions. By conducting an analysis, businesses can ensure they are in compliance with these regulations and avoid potential penalties.
- Improved public perception: In today's society, there is a growing awareness and concern about climate change. By conducting CO2 emission analysis and taking steps to reduce emissions, businesses can improve their public perception and reputation, attracting environmentally conscious customers and investors.
- Cost savings: Reducing CO2 emissions can also result in cost savings for businesses. By improving energy efficiency, companies can reduce their energy bills and operating costs, while also reducing their carbon footprint.
- Future-proofing: As the world transitions towards a low-carbon economy, businesses that are proactive in reducing their CO2 emissions will be better positioned to succeed in the future. Conducting CO2 emission analysis and taking steps to reduce emissions can help businesses future-proof themselves and remain competitive.

Disadvantages:

- Incomplete picture: CO2 emission analysis only looks at the carbon dioxide released during the burning of fossil fuels. It does not take into account other greenhouse gases, such as methane or nitrous oxide, which can also contribute to climate change.
- Limited scope: CO2 emission analysis is typically limited to a specific geographic area or sector. This can lead to a narrow view of the problem, as emissions from other regions or sectors may be equally or more important.
- Uncertainty: There can be significant uncertainty in estimating CO2 emissions, particularly for smaller sources such as individual factories or buildings. This can make it difficult to compare emissions from different sources or track changes over time.
- Cost: CO2 emission analysis can be expensive and time-consuming, particularly for large-scale projects that involve monitoring emissions from multiple sources.
- Incentivizes Offshoring: CO2 emission analysis can lead to companies offshoring their emissions to countries with lax environmental regulations or underdeveloped infrastructure. This can make it difficult to accurately measure the emissions from a specific source.
- Disincentivizes Clean Technology Development: CO2 emission analysis can create a disincentive for companies to invest in clean technology development. If a company is penalized for emitting CO2, it may be more cost-effective for them to simply pay the penalty rather than invest in cleaner technology.
- Ignores Non-Carbon Emission Impacts: CO2 emission analysis ignores other environmental impacts of activities that generate carbon emissions, such as water use, land use, and chemical pollution. This can result in an incomplete picture of the environmental impact of a particular activity

9.1.: APPLICATIONS :

The areas where this solution can be applied :

CO_2 emission analysis has a wide range of applications in various fields such as environmental science, engineering, public policy, economics, and business. Here are some specific examples of how CO_2 emission analysis is applied in different contexts:

- Environmental science: CO_2 emission analysis is used to measure and monitor the amount of CO_2 being released into the atmosphere by human activities such as transportation, energy production, and industrial processes. This helps scientists understand the impact of human activities on the environment and climate change.
- Engineering: CO_2 emission analysis is used to design and optimize systems that reduce greenhouse gas emissions. For example, engineers can use CO_2 emission analysis to design more fuel-efficient engines, buildings that use less energy for heating and cooling, and renewable energy systems that produce less CO_2.
- Public policy: CO_2 emission analysis is used to inform policy decisions related to climate change and energy policy. For example, policymakers can use CO_2 emission analysis to evaluate the effectiveness of carbon pricing schemes, emissions standards, and renewable energy targets.
- Economics: CO_2 emission analysis is used to evaluate the economic costs and benefits of different policy options related to climate change and energy policy. For example, economists can use CO_2 emission analysis to assess the costs and benefits of different energy sources, such as coal, natural gas, and renewables.
- Business: CO_2 emission analysis is used by businesses to measure and manage their carbon footprint. This helps businesses identify opportunities to reduce emissions and improve their environmental performance, which can also lead to cost savings and increased competitiveness.

CHAPTER - 10

CONCLUSION & FUTURE SCOPE

10. CONCLUSION SUMMARIZING THE ENTIRE WORK AND FINDINGS :

However, in general, the conclusion of CO2 emission analysis is that human activities, such as burning fossil fuels, deforestation, and industrial processes, are releasing large amounts of carbon dioxide into the atmosphere, leading to global warming and climate change. The analysis also highlights the need for urgent action to reduce greenhouse gas emissions and shift towards renewable energy sources to mitigate the impacts of climate change. Additionally, CO2 emission analysis often examines the role of different sectors and countries in contributing to emissions and identifies potential solutions and policies to reduce them.

FUTURE SCOPE :

ENHANCEMENTS THAT CAN BE MADE IN THE FUTURE :

The future scope of CO2 emission analysis is likely to continue to grow in importance and relevance as the world increasingly recognizes the urgency of addressing climate change. Some potential areas of focus for future CO2 emission analysis include:

- Further refining and improving our ability to measure and track CO2 emissions. This could involve developing new sensors and monitoring technologies, as well as improving our modelling and data analysis capabilities.
- Conducting more detailed analyses of specific sectors or regions to identify where emissions are coming from and how they can be reduced. For example, a more detailed analysis of the transportation sector could help identify specific policies or

technologies that could reduce emissions from cars, trucks, and other vehicles.

- Exploring the relationship between CO2 emissions and other environmental or social factors, such as air quality, water scarcity, or income inequality. This could help policymakers identify strategies that not only reduce emissions, but also address other pressing issues.

- Analysing the economic and social impacts of different emissions reduction strategies, to help guide decision-making around policies and investments. For example, a detailed cost-benefit analysis of a carbon tax or cap-and-trade system could help policymakers determine whether it is a viable option for reducing emissions.

- Developing new tools and technologies for reducing CO2 emissions, such as carbon capture and storage, renewable energy systems, and new materials and processes that require less energy to produce.

- Overall, the future scope of CO2 emission analysis is likely to be wide-ranging and multifaceted, as scientists, policymakers, and businesses work together to address the urgent challenge of climate change.

APPENDIX

SOURCE CODE :

```html
<!doctype html>
<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>CO2 Emission</title>
    <link rel="icon" href="image/fav.png">
    <link href="bootstrap/bootstrap.min.css" rel="stylesheet">
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.9.1/font/bootstrap-icons.css">
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/@fancyapps/ui@4.0/dist/fancybox.css" type="text/css" media="screen" />
<!--    <link href="https://unpkg.com/aos@2.3.1/dist/aos.css"
rel="stylesheet">-->

    <link rel="stylesheet" href="style.css">
</head>

<body>


    <!--  header start -->
    <nav id="navbar" class="navbar nav navbar-expand-lg">
        <div class="container">
            <img class="img-fluid w-25" src="image/" alt="">
            <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-
```

```html
controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
          <span class=""> <i class="bi bi-list"></i> </span>
        </button>
        <div class="collapse navbar-collapse"
id="navbarSupportedContent">
          <ul class="navbar-nav ms-auto mb-2 mb-lg-0">
            <li class="nav-item ">
              <a class="nav-link scroll h1 fw-bold" aria-current="page"
href="#home">HOME</a>
            </li>
            <li class="nav-item">
              <a class="nav-link scroll h1 fw-bold"
href="#about">ABOUT </a>
            </li>
            <li class="nav-item ">
              <a class="nav-link scroll h1 fw-bold" aria-current="page"
href="#home">DASHBOARD & STORY</a>
            </li>
            <li class="nav-item">
              <a class="nav-link scroll h1 fw-bold"
href="#service">SERVICES </a>
            </li>
            <li class="nav-item">
              <a class="nav-link scroll h1 fw-bold"
href="#news">NEWS</a>
            </li>
            <li class="nav-item">
              <a class="nav-link btn-one h1 fw-bold"
href="#contact">CONTACT </a>
            </li>
          </ul>
        </div>
      </div>
```

```
    </nav>
    <!--   header end -->
    <!--    banner area start -->
    <div class="banner-area" id="home">
       <div id="carouselExampleCaptions" class="carousel slide" data-bs-
ride="false">
           <div class="carousel-indicators">
               <button type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide-to="0" class="active"
aria-current="true" aria-label="Slide 1"></button>
               <button type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide-to="1" aria-
label="Slide 2"></button>
               <button type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide-to="2" aria-
label="Slide 3"></button>
           </div>
           <div class="carousel-inner">
               <div class="carousel-item active">
                  <img src="image/01.jpg" class="d-block w-100" alt="...">
                  <div class="carousel-caption my-auto  pb-5">
                      <p class=" fw-bold my-2 py-2 amet text-uppercase" data-
aos="zoom-in-left" ></p>
                      <h1 class="mt-3  mb-3 display-1 fw-bold" data-
aos="zoom-in-right" >WELCOME TO THE GLOBAL CO2
EMISSION ANALYSIS</h1>
                      <button class="button-one mt-5 me-0 me-sm-5" data-
aos="zoom-out-up" >Get Start</button>
                      <button class="button-two mt-5" data-aos="zoom-out-
up" >Get Involved</button>
                   </div>
               </div>
               <div class="carousel-item">
                  <img src="image/02.jpg" class="d-block w-100" alt="...">
```

```html
            <div class="carousel-caption" data-aos="fade-up" data-aos-
duration="3000">
                <p class=" fw-bold my-2 py-2 text-uppercase">We
Provide Energy</p>
                <h1 class="mt-3 amet text-capitalize display-1 fw-
bold">Born For The Present Making The Future </h1>
                <button class="button-one mt-5 me-0 me-sm-5">Get
Start</button>
                <button class="button-two mt-5">Get Involved</button>
            </div>
          </div>
          <div class="carousel-item">
            <img src="image/03.jpg" class="d-block w-100" alt="...">
            <div class="carousel-caption " data-aos="fade-up" data-aos-
duration="3000">
                <p class=" fw-bold my-2 py-2 text-uppercase">THE
REAL DEAL</p>
                <h1 class="mt-3 amet display-1 fw-bold">Making The
Difference To Every Life We Touch</h1>
                <button class="button-one mt-5 me-0 me-sm-5">Get
Start</button>
                <button class="button-two mt-5">Get Involved</button>
            </div>
          </div>
        </div>
        <button class="carousel-control-prev" type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide="prev">
          <span class="carousel-control-prev-icon" aria-
hidden="true"></span>
          <span class="visually-hidden">Previous</span>
        </button>
        <button class="carousel-control-next" type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide="next">
```

```html
          <span class="carousel-control-next-icon" aria-
hidden="true"></span>
            <span class="visually-hidden">Next</span>
        </button>


      </div>
  </div>
  <!--   banner area end -->
  <!-- about area start -->
  <div class="container my-5 py-5" id="about">
    <div class="row">
      <div class="col-lg-12">
        <h1 class="siam text-center mb-5 pb-5 display-4 fw-
bold">CONTROLLING CO2 EMISSION</h1>
      </div>
      <div class="col-lg-6 my-auto">
        <div class="emon"  >
          <h1>Use Natural Resources to Overcome CO2
Emission</h1>
          <p class="mt-5 lh-lg">Natural resources are important to
green infrastructure because they contribute to its development by
providing a variety of benefits, such as:

          drinking water
          reducing flood risk
          functioning as a carbon sink (absorbing carbon dioxide)
          improving air quality, promoting biodiversity
          supporting recreational activities such as hiking or
canoeing</p>
          <button class="button-one mt-5">HOW WE
GENERATE</button>
        </div>
      </div>
      <div class="col-lg-6 mt-5 mt-sm-0">
```

```html
            <div class="rifat"   >
               <img class=" img-fluid image-one" src="image/CO2
image.jpg" alt="">
            </div>
          </div>


      </div>
   </div>
   <!--  about area end -->
   <!--Dashboard & Story-->

   <div class="col-lg-12 mb-5">
      <div class="masum text-center">
         <h1 class="fw-bold text-center mb-4">Dashboard</h1>
         <h5></h5>
         <p><div class='tableauPlaceholder' id='viz1681192342351'
style='position: relative'><noscript><a href='#'><img alt='Dash1 '
src='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47
;Co&#47;CO2demodash_16811007183710&#47;Dash1&#47;1_rss.png'
style='border: none' /></a></noscript><object class='tableauViz'
style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root'
value='' /><param name='name'
value='CO2demodash_16811007183710&#47;Dash1' /><param
name='tabs' value='no' /><param name='toolbar' value='yes' /><param
name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#
47;Co&#47;CO2demodash_16811007183710&#47;Dash1&#47;1.png'
/> <param name='animate_transition' value='yes' /><param
name='display_static_image' value='yes' /><param
name='display_spinner' value='yes' /><param name='display_overlay'
value='yes' /><param name='display_count' value='yes' /><param
name='language' value='en-US' /></object></div>          <script
```

```
type='text/javascript'>                    var divElement =
document.getElementById('viz1681192342351');                    var
vizElement = divElement.getElementsByTagName('object')[0];
if ( divElement.offsetWidth > 800 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.off
setWidth*0.75)+'px';} else if ( divElement.offsetWidth > 500 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.off
setWidth*0.75)+'px';} else {
vizElement.style.width='100%';vizElement.style.height='1277px';}
var scriptElement = document.createElement('script');
scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement);
</script></p>
     </div>
   </div>


   <div class="col-lg-12 mb-5">
     <div class="masum text-center">
        <h1 class="fw-bold text-center mb-4">Story</h1>
        <h5></h5>
        <p></p><div class='tableauPlaceholder' id='viz1681192431151'
style='position: relative'><noscript><a href='#'><img alt='CO2
Emission Story '
src='https://public.tableau.com/static/images/Co/CO2demoStory_16811009455610/CO2EmissionStory/1_rss.png' style='border: none' /></a></noscript><object
class='tableauViz'  style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root'
value='' /><param name='name'
value='CO2demoStory_16811009455610/CO2EmissionStory'
/><param name='tabs' value='no' /><param name='toolbar' value='yes'
/><param name='static_image'
value='https://public.tableau.com/static/images/
```

47;Co/CO2demoStory_16811009455610/CO2EmissionStory /1.png' /> <param name='animate_transition' value='yes' /><param name='display_static_image' value='yes' /><param name='display_spinner' value='yes' /><param name='display_overlay' value='yes' /><param name='display_count' value='yes' /><param name='language' value='en-US' /></object></div>   <script type='text/javascript'>   var divElement = document.getElementById('viz1681192431151');   var vizElement = divElement.getElementsByTagName('object')[0]; vizElement.style.width='100%';vizElement.style.height=(divElement.offsetWidth*0.75)+'px';   var scriptElement = document.createElement('script');   scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js'; vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>

```
    </div>
  </div>
  <!-- service area start -->
  <div class="container my-5 py-5" id="service">
    <div class="row">
      <div class="col-lg-12 mb-5">
        <div class="masum text-center">
          <h1 class="fw-bold text-center mb-4">Important Steps to
Reduce CO2 Emission</h1>
          <h5></h5>
        </div>
      </div>
      <div class="col-lg-4">
        <div class="card-one new-card " style="">
        <div class="card-body  text-center shadow my-5 py-5" data-
aos="fade-down-right">
            <h2 class="card-title">Reduce Air Travel</h2>
            <p class="card-text mt-4 mb-4">But as public awareness
of the need to reduce our individual and collective carbon footprints in
```

order to avoid climate disaster develops, pressure on numerous businesses to find sustainable solutions are grown</p>
                    Go somewhere
                </div>
            </div>
        </div>
        <div class="col-lg-4">
            <div class="card-one new-card " style="">
                <div class="card-body text-center shadow my-5 py-5" >
                    <h2 class="card-title">Planting Trees</h2>
                    <p class="card-text mt-4 mb-4">Tree plantation is very necessary because trees provide oxygen to the environment and make the air quality better. If more trees are planted, then the world's environment will become a safer place to live in</p>
                    Go somewhere
                </div>
            </div>
        </div>
        <div class="col-lg-4">
            <div class="card-one new-card " style="">
                <div class="card-body text-center shadow my-5 py-5" >
                    <h2 class="card-title">Switch To Clean Energy</h2>
                    <p class="card-text mt-4 mb-4">Generating energy that produces no greenhouse gas emission from fossil fuels and reduces some types of air pollution. Diversifying energy supply and reducing dependence on imported fuels</p>
                    Go somewhere
                </div>
            </div>
        </div>
        <div class="col-lg-4">
            <div class="card-one new-card " style="">
                <div class="card-body text-center shadow my-5 py-5" data-aos="fade-down-right">

70

```html
            <h2 class="card-title">Usage of Solar energy</h2>
            <p class="card-text mt-4 mb-4">Solar is renewable ,
green energy source. Unlike fossil fuel based thermal power, electricity
produced by a solar power syatem is low carbon/low emissions clean
energy</p>
            <a href="#" class="btn button-one">Go somewhere</a>
          </div>
        </div>
      </div>
      <div class="col-lg-4">
        <div class="card-one new-card " style="">
          <div class="card-body  text-center shadow my-5 py-5" data-
aos="fade-up">
            <h2 class="card-title">Try Other Modes Of
Transport</h2>
            <p class="card-text mt-4 mb-4">Electric Vehicles (EVs)
offer a low carbon alternative to gasoline powered vehicles. Optimal
driving techniques can also help you cut emissions and save money
gasoline powered car</p>
            <a href="#" class="btn button-one">Go somewhere</a>
          </div>
        </div>
      </div>
      <div class="col-lg-4">
        <div class="card-one new-card " style="">
          <div class="card-body  text-center shadow my-5 py-5" >
            <h2 class="card-title">Reduce,Reuse,And Recycle</h2>
            <p class="card-text mt-4 mb-4">Recycling helps reduce
greenhouse gas emissions by reducing energy consumption. Using
recycled materials to make new products reduces the need for virgin
materials</p>
            <a href="#" class="btn button-one">Go somewhere</a>
          </div>
        </div>
```

```html
        </div>
      </div>
    </div>
    <!-- service area end -->
    <!--    gallery area start  -->
    <div class="container py-5 mb-5 gallery-area" id="fleet">
      <div class="row">
        <div class="col-md-12 mb-5 text-center">
          <p class="h1"> OUR GALLERY </p>
        </div>
      </div>
      <div class="row">
        <div class="col-md-3 my-3" data-aos="fade-down-right" >
          <a data-fancybox="gallery" data-src="image/co-why-is-
carbon-dioxide-bad-4864246_V2-
4ea7c0936b5a4cd3b8d4f2b41ec02f63">
            <img alt="" src="image/co-why-is-carbon-dioxide-bad-
4864246_V2-4ea7c0936b5a4cd3b8d4f2b41ec02f63.png" />
          </a>
        </div>
        <div class="col-md-3 my-3" >
          <a data-fancybox="gallery" data-src="image/12.jpg">
            <img alt="" src="image/CO2 1.jpeg" />
          </a>
        </div>
        <div class="col-md-3 my-3" >
          <a data-fancybox="gallery" data-src="image/13.jpg">
            <img alt="" src="image/CO2 22.jpeg" />
          </a>
        </div>
        <div class="col-md-3 my-3"  >
          <a data-fancybox="gallery" data-src="image/14.jpg">
            <img alt="" src="image/CO2 3.jpeg" />
          </a>
```

```html
        </div>
        <div class="col-md-3 my-3" data-aos="fade-up-right" >
          <a data-fancybox="gallery" data-src="image/15.jpg">
            <img alt="" src="image/CO2 44.jpg" />
          </a>
        </div>
        <div class="col-md-3 my-3" data-aos="fade-up" >
          <a data-fancybox="gallery" data-src="image/07.jpg">
            <img alt="" src="image/CO2 77.jpeg" />
          </a>
        </div>
        <div class="col-md-3 my-3" data-aos="fade-up" >
          <a data-fancybox="gallery" data-src="image/05.jpg">
            <img alt="" src="image/CO2 88.jpeg" />
          </a>
        </div>
        <div class="col-md-3 my-3" data-aos="fade-up-left" >
          <a data-fancybox="gallery" data-src="image/08.jpg">
            <img alt="" src="image/CO2  4.jpeg" />
          </a>
        </div>
      </div>
    </div>

    </div>
    <!-- counter area end -->
    <!-- section area start -->
    <div class="milon my-5 py-5">
      <div class="container" id="news">
        <div class="row">
          <div class="col-lg-12">
            <div class="liton">
              <h1 class="text-center display-5 fw-bold text-white">Recent News</h1>
```

```html
                    <p class="text-center mt-4 text-white"></p>
                </div>
            </div>
        </div>
        <div class="row my-5 py-5 g-4">
            <div class="col-lg-4">
                <div class="card rounded-0 border-0"  >
                    <img src="image/05.jpg" class="card-img-top mahedi
rounded-0 border-0" alt="...">
                    <div class="card-body">
                        <p class="mt-2">July 21, 2022</p>
                        <h3 class="card-title fw-bold">How floating solar
panels are being used to power electric grids</h3>
                        <p class="card-text mt-4">In nearly a dozen countries
around the world,floating solar farms are providing a welcome
alternative to ground mounted modules, with the potential to
significantly boost clean power as the world races to cut carbon
emissions</p>
                    </div>
                </div>
            </div>
            <div class="col-lg-4">
                <div class="card rounded-0 border-0" data-aos="flip-up">
                    <img src="image/flight.jpg" class="card-img-top mahedi
rounded-0 border-0" alt="...">
                    <div class="card-body">
                        <p class="mt-2">september 3, 2021</p>
                        <h3 class="card-title fw-bold">European Aviation
Sector Fears CO2 Rules Could clip Its Wings</h3>
                        <p class="card-text mt-4">European Airlines Are
Concerned That They Could  Lose passengers to foreign airlines that do
not need to adhere to the emissions reduction regulations imposed on the
EU</p>
```

```html
                </div>
              </div>
            </div>
            <div class="col-lg-4">
              <div class="card rounded-0 border-0" data-aos="fade-left"
>
                <img src="image/07.jpg" class="card-img-top mahedi
rounded-0 border-0" alt="...">
                <div class="card-body ">
                    <p class="mt-2">April 28, 2023</p>
                    <h3 class="card-title fw-bold">Renewables to
dominate growth of global electricity supply: IEA report</h3>
                    <p class="card-text mt-4">More than 70 per cent of
the increase in global electricity demand is expected to come from
China, India and Southeast Asia, it said, with a rider that considerable
uncertainties remain over trends in China as its economy emerges from
strict covid restrictions</p>

                </div>
              </div>
            </div>
          </div>
        </div>
    </div>
    <!-- section area end -->
    <!-- price area start -->
    <div class="plan my-5 py-5">
      <div class="container ">
        <div class="row">
          <div class="col-lg-12">
            <div class="price text-center">
                <p></p>
                <h1 class="color-text">Benefits Of Controlling CO2
Emissions</h1>
```

```html
                <hr class="h-color mt-4 mx-auto">
              </div>
            </div>
            <div class="col-lg-4 my-3 py-3 ">
              <div class="card-four shadow text-center my-0 my-sm-5
py-5"  >
                <h3 class="fw-bold mb-3">Saving The Planet</h3>
                <p>A lot has been written about carbon offsets and
planting trees to reabsorb the CO2 released into the atmosphere</p>
                <p><sup class="h3"></sup><span
class="h1"></span></p>
                <button class="button-one mb-4">Get Start</button>
                <h5></h5>
                <hr class="h-color mx-auto">
                <h5></h5>
                <hr class="h-color mx-auto">
                <h5></h5>
                <hr class="h-color mx-auto">
                <h5></h5>
              </div>
            </div>
            <div class="col-lg-4 my-3 py-3">
              <div class="card-four shadow text-center my-0 my-sm-5
py-5"  >
                <h3 class="fw-bold mb-3">Saving Your Budget</h3>
                <p>While sustainability and zero emissions schemes are
of the utmost importance to both fleets and businesses</p>
                <p><sup class="h3"></sup><span
class="h1"></span></p>
                <button class="button-one mb-4">Get Start</button>
                <h5></h5>
                <hr class="h-color mx-auto">
                <h5></h5>
                <hr class="h-color mx-auto">
```

```html
            <h5></h5>
            <hr class="h-color mx-auto">
            <h5></h5>
          </div>
        </div>
        <div class="col-lg-4 my-3 py-3">
          <div class="card-four shadow text-center my-0 my-sm-5 py-5"  >
            <h3 class="fw-bold mb-3">Health Benefits</h3>
            <p>Reducing greenhouse gas emissions can improve air quality and saves life. It also prevents millions of premature deaths due to air pollution</p>
            <p><sup class="h3"></sup><span class="h1"></span></p>
            <button class="button-one mb-4">Get Start</button>
            <h5></h5>
            <hr class="h-color mx-auto">
            <h5></h5>
            <hr class="h-color mx-auto">
            <h5></h5>
            <hr class="h-color mx-auto">
            <h5></h5>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- price area end -->
  <!-- customer area start -->
  <div class="bg-five">
    <div class="container my-5 py-5">
      <div class="row">
        <div class="col-lg-12 ">
          <div class="customer text-center">
```

```html
                <h1 class="fw-bold raju mb-5">Customers Of Our Solar
Panels</h1>


            </div>
          </div>
        </div>
        <div class="row">
          <div class="col-lg-9 mx-auto text-white">
            <div id="carouselExampleControls" class="carousel slide"
data-bs-ride="carousel">
                <div class="carousel-inner mt-5">
                  <div class="carousel-item active text-center">
                    <img class="img-fluid noman " src="image/18.jpg"
alt="">
                    <h4 class="mt-4 fw-bold">Mr. john</h4>

                    <p class=" mt-3">Lorem ipsum dolor sit amet,
consectetur Lorem ipsum dolor sit amet, consectetur adipisicing elit.
Molestiae, dignissimos!adipisicing elit. Tempora, hic sequi, veniam
necessitatibus reiciendis magni maxime unde dicta. Et, placeat.</p>
                  </div>
                  <div class="carousel-item text-center">
                    <img class="img-fluid noman " src="image/19.jpg"
alt="">
                    <h4 class="mt-4 fw-bold">Mr. Harry </h4>

                    <p class=" mt-3">Lorem ipsum dolor sit amet,
consectetur Lorem ipsum dolor sit amet, consectetur adipisicing elit.
Molestiae, dignissimos!adipisicing elit. Tempora, hic sequi, veniam
necessitatibus reiciendis magni maxime unde dicta. Et, placeat.</p>
                  </div>
                  <div class="carousel-item text-center">
                    <img class="img-fluid noman " src="image/20.jpg"
alt="">
```

```html
                    <h4 class="mt-4 fw-bold">Mr. Watson</h4>


                    <p class=" mt-3">Lorem ipsum dolor sit amet,
consectetur Lorem ipsum dolor sit amet, consectetur adipisicing elit.
Molestiae, dignissimos!adipisicing elit. Tempora, hic sequi, veniam
necessitatibus reiciendis magni maxime unde dicta. Et, placeat.</p>
                  </div>
                </div>
                <button class="carousel-control-prev" type="button"
data-bs-target="#carouselExampleControls" data-bs-slide="prev">
                    <span class="carousel-control-prev-icon" aria-
hidden="true"></span>
                    <span class="visually-hidden">Previous</span>
                </button>
                <button class="carousel-control-next" type="button"
data-bs-target="#carouselExampleControls" data-bs-slide="next">
                    <span class="carousel-control-next-icon" aria-
hidden="true"></span>
                    <span class="visually-hidden">Next</span>
                </button>
              </div>
            </div>
        </div>
      </div>
  </div>
  <!-- customer area end -->


  <!-- contact area end -->
  <div class="container py-5 mt-5 mb-0 mb-sm-5" id="contact">
    <div class="row">
      <div class="col-lg-7 my-auto">
        <div class="pe-2 pe-sm-5 mb-5 mb-sm-0">
          <p class="h5 c-one mb-3">CONTACT US</p>
          <p class="h1 text-color fw-bold">GET IN TOUCH </p>
```

```html
<p class="mt-3 c-two">Desire that they cannot foresee the
pain and trouble that are bound
        equal blame belongs to their duty.</p>
        <form class="contact-form wow fadeInLeft"
id="reused_form" action="POST">
            <div class="row my-form">
               <div class="col-lg-12">
                  <div class="form-floating mt-4">
                     <input name="name" id="name" type="text"
class="form-control" placeholder="Your Name*" required="">
                     <label for="name">Your Name</label>
                  </div>
               </div>
               <div class="col-lg-12">
                  <div class="form-floating mt-4">
                     <input name="email" id="email" type="email"
class="form-control" placeholder="Your Email*" required="">
                     <label for="email">Email address</label>
                  </div>
               </div>
            </div>
            <div class="row my-form">
               <div class="col-lg-12">
                  <div class="form-floating mt-4">
                     <input type="text" class="form-control"
name="subject" id="subject" placeholder="Your Subject.." required="">
                     <label for="subject">Your Subject</label>
                  </div>
               </div>
            </div>
            <div class="row my-form">
               <div class="col-lg-12">
                  <div class="form-floating mt-4">
```

```html
                    <textarea style="height: 150px"
name="comments" id="comments" cols="20" rows="50" class="form-
control" placeholder="Your message..."></textarea>
                    <label for="comments">Your message</label>
                  </div>
                </div>
              </div>
              <div class="row mt-5">
                <div class="col-lg-12 text-center">
                  <button type="submit" class="btn button-one">
                    Send message</button>
                </div>
              </div>
            </form>

            <div class="pt-5 mt-5" id="success_message"
style="display:none; ">
              <h3 class="text-success">Your message submit
successfully!</h3>
            </div>
            <div id="error_message" style="display:none; ">
              <h3 class="text-danger">Error</h3> Sorry there was an
error sending your form.
            </div>
          </div>
        </div>
        <div class="col-lg-5">
          <div class=" contact-area my-5 py-5" >
            <h5 class="ms-5 fw-bold">OUR LOCATION</h5>
            <div class="d-flex ms-5 mt-3">
              <div class="flex-shrink-0">
                <i class="bi bi-geo-alt-fill"></i>
              </div>
              <div class="flex-grow-1 ms-3">
```

```
            <p> Sydney, 3000</p>
            <p class="mb-5"> Australia</p>
          </div>
        </div>
        <h5 class="ms-5 fw-bold">QUICK CONTACT</h5>
        <div class="d-flex ms-5 mt-3">
          <div class="flex-shrink-0">
            <i class="bi bi-envelope-fill"></i>
          </div>
          <div class="flex-grow-1 ms-3">
            <p> eample.com</p>
          </div>
        </div>
        <div class="d-flex ms-5 ">
          <div class="flex-shrink-0">
            <i class="bi bi-telephone-fill"></i>
          </div>
          <div class="flex-grow-1 ms-3">
            <p> +68 4 2375 6783</p>
          </div>
        </div>
        <h5 class="ms-5 fw-bold mt-4">OPENING HOURS</h5>
        <div class="d-flex ms-5 mt-3">
          <div class="flex-grow-1 ">
            <p> From Saturday - Thursday</p>
            <p>9:00 AM - 5:00 PM</p>

          </div>
        </div>
      </div>
    </div>
  </div>

</div>
```

```html
<!--  contact area end -->
<!--   footer start -->
<div class="pranto ">
  <div class="container my-0 my-sm-5 py-5 ">
    <div class="row">
      <div class="col-lg-4">
        <div class="fuga">
          <a class="navbar-brand pe-5" href="#">
            <img class="shuvo" src="image/logo.png" alt="">

          </a>
          <p class="h3 mt-5  fw-bold">ABOUT</p>
          <p class=" me-5 mt-4">Carbon dioxide emissions are the
primary driver of global climate change. It's widely recognised that to
avoid the worst impacts of climate change, the world needs to urgently
reduce emissions. But, how this responsibility is shared between regions,
countries, and individuals has been an endless point of contention in
international discussions.</p>

        </div>
      </div>
      <div class="col-lg-3">
        <h5 class="">Quick Links</h5>
        <ul class="list-unstyled mukta pt-3 lh-lg ">
          <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Home</a></li>
          <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Features</a></li>
          <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Examples</a></li>
          <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Pricing</a></li>
```

```html
                <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Get Start</a></li>

          </ul>
        </div>

        <div class="col-lg-5">
           <h5 class="">Contact Info</h5>
           <ul class="list-unstyled mukta pt-3 lh-lg ">
             <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Sydney, 3000</a></li>
             <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
Australia</a></li>
             <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
example.com</a></li>
             <li><a href="#"> <i class="bi bi-arrow-right-short"></i>
+68 4 2375 6783</a></li>

           </ul>
         </div>
       </div>
       <div class="row">
         <div class="collg-4">
           <div class="icon">
             <a class="ms-0" href="#">
               <i class="bi bi-twitter"></i>
             </a>
             <a href="#">
               <i class="bi bi-instagram"></i>
             </a>
             <a href="#">
               <i class="bi bi-discord"></i>
             </a>
             <a href="#">
```

```html
                <i class="bi bi-reddit"></i>
              </a>
              <a href="#">
                <i class="bi bi-youtube"></i>
              </a>
            </div>
          </div>
        </div>


      </div>
      <hr class="my-5">

      <div class="container ">
        <div class="row">
          <div class="col-lg-12 text-center">
            <p>Copyright © 2022 Ataur</p>
          </div>
        </div>
      </div>
    </div>
    <!--    footer end -->

    <div class="go-top active">
      <i class="bi bi-arrow-up"></i>
    </div>


    <script src="bootstrap/bootstrap.bundle.min.js"></script>
    <script src="js/jquery.min.js"></script>
    <script
src="https://cdn.jsdelivr.net/npm/@fancyapps/ui@4.0/dist/fancybox.um
d.js"></script>
    <!--       counter js-->
```

```html
    <script src="https://unpkg.com/counterup2@2.0.2/dist/index.js">
</script>

    <script src="js/script.js"></script>
    <script src="js/form.js"></script>


</body>

</html>
```