



**Bharatiya Vidya Bhavans' Sardar Patel Institute of Technology  
Munshinagar, Andheri(W), Mumbai-400058**

**(Autonomous College Affiliated to University of Mumbai)**

**Course Name: Advance Data Visualization**

**Experiment No.6**

**Date:6/10/24**

**Name: Shriya Parab**

**UID: 2021700044**

**Branch: CSEDS**

**Aim:**

To design interactive dashboards using Power BI for visualizing and analyzing an Animal/Wildlife/Marine dataset, employing both basic and advanced charts to uncover insights and trends.

**Objectives:**

1. To create visually appealing and interactive dashboards that provide insights into the dataset.
2. To explore the distribution, trends, and relationships within the dataset using various types of visualizations.
3. To enable data-driven storytelling by highlighting key patterns, anomalies, and correlations.

## DAX queries

```
1 AverageLifespan =  
2 AVERAGEX (  
3     'Animal Dataset',  
4     VALUE(MID('Animal Dataset'[Lifespan (years)], 1, FIND("-", 'Animal Dataset'[Lifespan (years)]) - 1))  
5 )  
6
```

```
1 CountByConservationStatus =  
2 COUNTROWS (  
3     FILTER (  
4         'Animal Dataset',  
5         'Animal Dataset'[Conservation Status] = "Least Concern"  
6     )  
7 )
```

```
1 AverageCarnivoreWeight =  
2 AVERAGEX (  
3     FILTER (  
4         'Animal Dataset',  
5         'Animal Dataset'[Diet] = "Carnivore"  
6     ),  
7     VALUE(MID('Animal Dataset'[Weight (kg)], 1, FIND("-", 'Animal Dataset'[Weight (kg)]) - 1))  
8 )
```

```
1 TotalUniquePredators = DISTINCTCOUNT('Animal Dataset'[Predators])
```

## Query Result:

### Data

Q Search

▼

Animal Dataset

☐

Animal

☐

Average Speed (km/h)

☐

📊

AverageCarnivoreWeight

☐

📊

AverageLifespan

☐

Color

☐

Conservation Status

☐

📊

CountByConservationStatus

☐

Countries Found

☐

Diet

☐

📊

DistinctCountriesFound

☐

Family

☐

Gestation Period (days)

☐

Habitat

☐

Height (cm)

☐

Lifespan (years)

☐

📊

Measure

☐

Offspring per Birth

☐

Predators

☐

Social Structure

☐

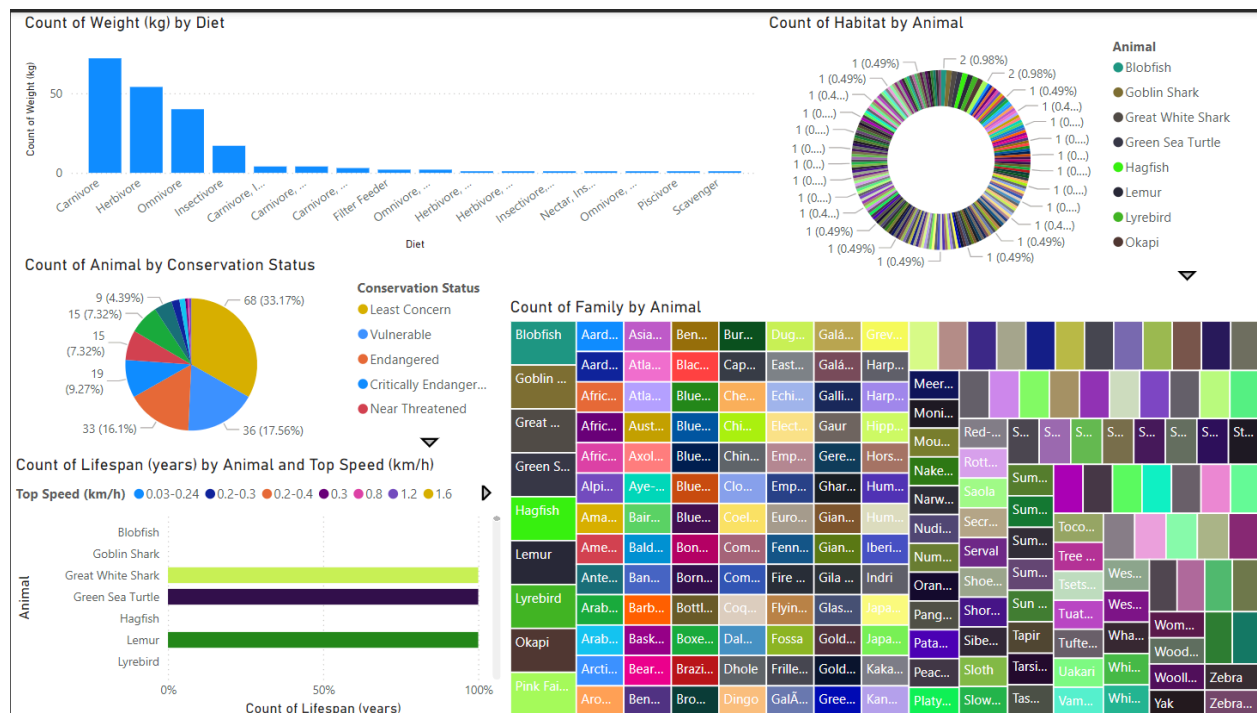
Top Speed (km/h)

☐

📊

TotalUniquePredators

## Dashboard



## Observations:

**Weight Distribution:** Carnivores tend to have higher weights compared to herbivores and omnivores, suggesting dietary preferences influence body size.

**Habitat Prevalence:** Marine habitats are the most common among the analyzed animals, reflecting the diversity of aquatic life.

**Conservation Concerns:** A significant number of animals are categorized as endangered or critically endangered, highlighting the need for conservation efforts.

**Family Diversity:** The "Aardvark" and "African" families appear to be the most represented, indicating potential taxonomic relationships or geographic distribution patterns.

**Lifespan-Speed Correlation:** There seems to be a general trend where animals with longer life spans have lower top speeds, suggesting potential trade-offs between longevity and agility.

**Dietary Patterns:** While specific patterns within habitats are not immediately apparent, further analysis could reveal correlations between diet and environmental factors.