BIRDS SPECIES OBSERVATION DATA SET

EXPLORATORY DATA ANALYSIS (EDA)

1.FOREST

The Exploratory Data Analysis was done on this Dataset.

Data cleaning-done

Null values - detected.

Visualisation -Done

INSIGHTS:

Distance Distribution: Most birds are recorded at certain popular ranges, with some distances being less common.

Flyover Behavior: Mostly False, but increases at longer distances.

Disturbances: Generally minimal impact, though some notable types occur.

Behavior vs. Distance: Clear trend—flyovers are more frequent at longer distances.

The majority of observations reported "No effect on count", but there are several other disturbance types present (e.g., noise, human activity), which could influence bird behavior or detectability.

Stable long-term monitoring protocols are essential for detecting real conservation-relevant trends (e.g., declines or range shifts).

Consistency in trained personnel boosts data reliability. Long-term monitoring programs should prioritize observer continuity and training.

1.GREENLAND

The Exploratory Data Analysis was done on this Dataset.

Data cleaning—done

Null values - detected.

Visualisation -Done

INSIGHTS:

Spikes or drops may indicate project-specific involvement or gaps in data collection.

Some observers may show activity starting later (may be no data before a certain year).

Others may stop contributing after a point.

Consistent lines suggest steady involvement over years.

The impact of agricultural expansion is evident. This could reflect conversion of natural land into farmland, affecting biodiversity and ecosystem services.

Logging is the most frequent disturbance, indicating heavy exploitation of forest resources or significant land-use change. This points to a need for stricter forestry management and sustainable logging practices.

"Observer A maintained a high and consistent level of activity across all years, indicating sustained involvement in the monitoring program."