**Tasks & Analysis Plan:**

**1. Data Cleaning & Preparation**

✅ Remove duplicate or missing entries in critical columns (e.g., Unique Squirrel ID).  
✅ Standardize categorical values (e.g., Primary Fur Color, Shift).  
✅ Convert Date to a readable format (MM/DD/YYYY).

**2. Population & Location Analysis**

📌 **Task:** Identify squirrel distribution across different areas in Central Park.  
🔹 Use **Pivot Tables & Charts** to show squirrel count by Hectare.  
🔹 Map locations using Lat/Long to visualize squirrel density (using scatter plots or heat maps).

**3. Behavioral Trends Over Time**

📌 **Task:** Analyze when squirrels are most active.  
🔹 Compare activity patterns for **Morning (AM) vs Afternoon (PM)** (Shift).  
🔹 Create a **trend line** for behaviors like Running, Climbing, Eating, and Foraging over different Date values.

**4. Fur Color & Age-Based Insights**

📌 **Task:** Identify if fur color and age influence squirrel activity.  
🔹 Create a **color distribution chart** based on Primary Fur Color.  
🔹 Compare activity levels (Running, Climbing, etc.) for different age groups (Age).

**5. Interaction & Communication Patterns**

📌 **Task:** Examine squirrel interactions and vocalizations.  
🔹 Visualize how often squirrels **approach humans**, are Indifferent, or Run from observers.  
🔹 Use a **stacked bar chart** to show vocalization patterns (Kuks, Quaas, Moans).

**6. Interactive Dashboard Creation**

📌 **Task:** Build a user-friendly **Excel Dashboard** with:  
✔ **Slicers** for filtering by Shift, Fur Color, Location, and Behavior.  
✔ **Pivot Charts & Graphs** for quick visual insights.  
✔ **Heatmaps & Conditional Formatting** to highlight high-activity areas.

**Bonus Tasks (Advanced Features)**

💡 Add a **searchable dropdown** to filter data dynamically.  
💡 Use **Macros or VBA** to reset filters and refresh charts.