**Electoral Bonds Analysis**

**# Report and key finding:**

1. **Purchase vs. Redemption Timeline:**
   * **No instance of a redemption occurring more than 15 days after the purchase date.**
2. **Data Merging and Validation:**
   * **Columns "Prefix" and "Bond Number" were merged to create a unique identifier for both datasets.**
   * **After merging:**
     1. **1,680 entries in the Purchase Data did not match with Redemption Data.**
     2. **130 entries in the Redemption Data did not match with Purchase Data.**
   * **Data types were standardized, and naming inconsistencies were cleaned.**
3. **Top Purchasers (2019–2024):**
   * **Top 5 Entities:**
     1. **Future Gaming and Hotel Services**
     2. **Megha Engineering and Infrastructure**
     3. **Qwik Supply Chain Private Limited**
     4. **Haldi Energy**
     5. **Vedanta Limited**
4. **Denomination Insights:**
   * **Bonds of ₹1 crore denomination dominate across all donations.**
5. **Time-Based Trends:**
   * **Peak Purchase Months: January, April, and October.**
   * **Peak Years for Purchases: 2022 and 2023.**
6. **Redemption Patterns:**
   * **Majority of bonds were redeemed within 5 days of purchase.**
7. **Political Party Encashments:**
   * **Top Political Parties by Encashment:**
     1. **BJP (Bharatiya Janata Party)**
     2. **Trinamool Congress**
     3. **Indian National Congress**

**#Data Source:**

* **Source: Data provided by SBI Bank to the Election Commission of India. (**[**Link**](https://www.eci.gov.in/disclosure-of-electoral-bonds)**)**
* **Datasets:**
  + **Purchase Data: Includes details of who purchased bonds and when.**
  + **Redemption Data: Includes details of who redeemed bonds and when.**

**#Data Exploration:**

* **New columns were added for day names, months, and years for analysis.**
* **Crosstab analysis was used to evaluate purchase trends vs. political party denomination sum amounts.**