Exploratory Data Analysis of Cases Data

Data

- Data of Cases with information about the case journey(Filing to Decision) was given.
- Dimension: 8,98,236 Cases(rows), 8 Attributes(columns)
- Columns and description:

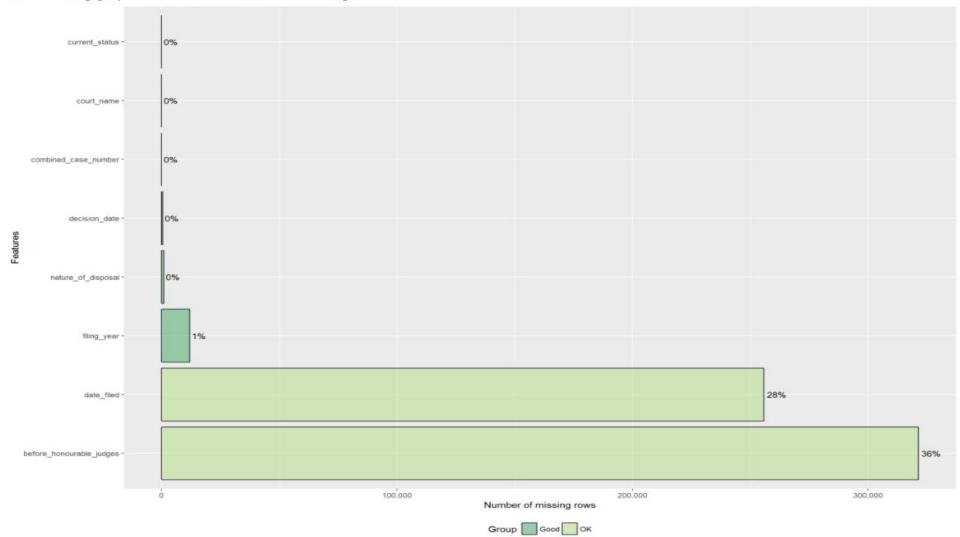
Column Name	Description
combined_case_number	A unique identification number for each case, made up of three components: a case type, the said number, and the year in which the case was instituted.
filing_year	The year in which a case is filed.
court_name	The name of the High Court in which a case is in process.
before_honourable_judges	The judge before whom a case appears in a court.
date_filed	The date on which a case is instituted and admitted into the High Court by the registry.
current_status	The situation of a case in process of the High Court; usually "disposed" or "pending"
noture of disposal	The resolution of a local matter. This could either be the dismissal or a sharpe, or a final judgement. Court records often an aif the nature of resolution
nature_of_disposal	The resolution of a legal matter. This could either be the dismissal or a charge, or a final judgement. Court records often specify the nature of resolution.
decision_date	The date on which final orders for a case are pronounced.

EDA – Missing Values

• There are few missing values in some columns as per below graph:

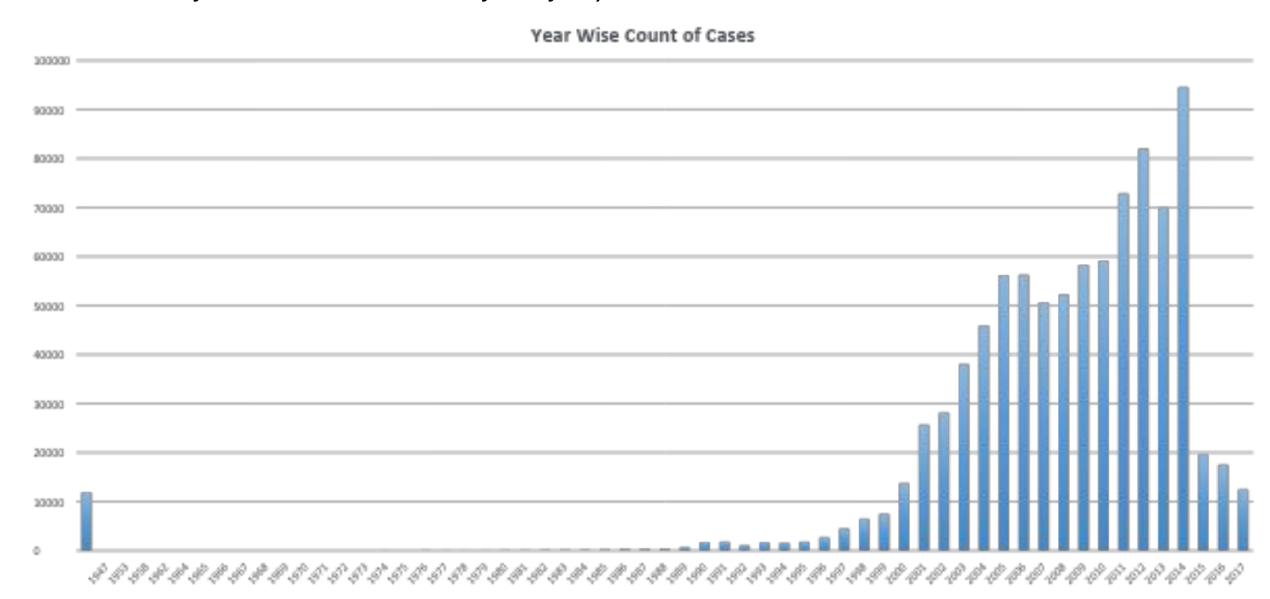
Missing Values

The following graph shows the distribution of missing values.



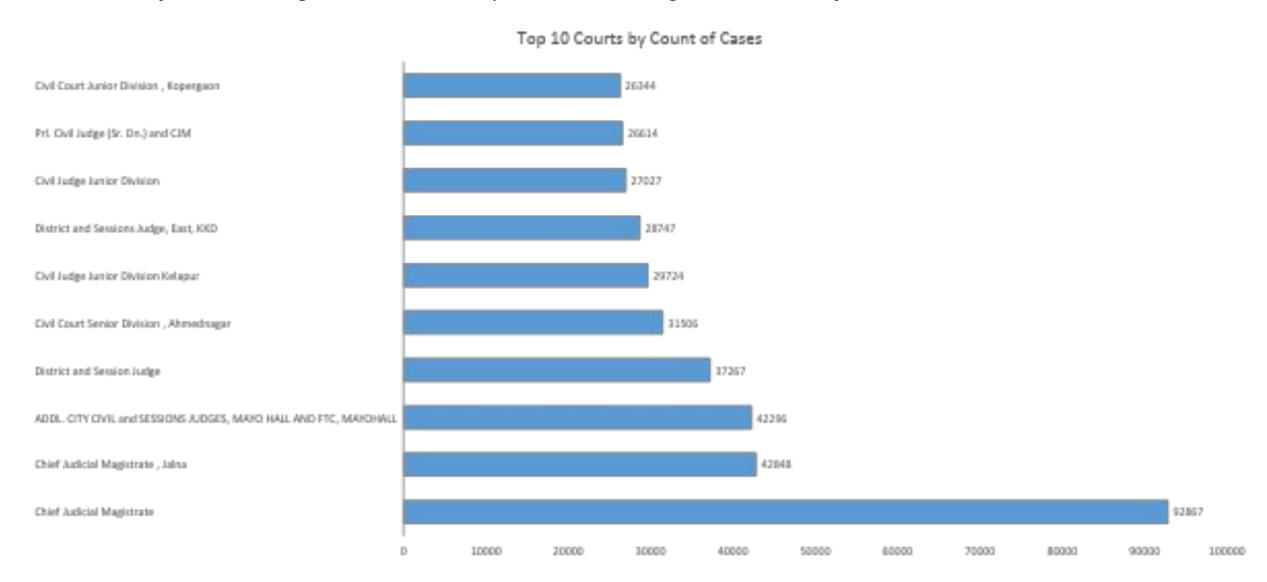
EDA – Year Wise Count of Cases Filed

• Most of the cases in this data are filed after year 1995.



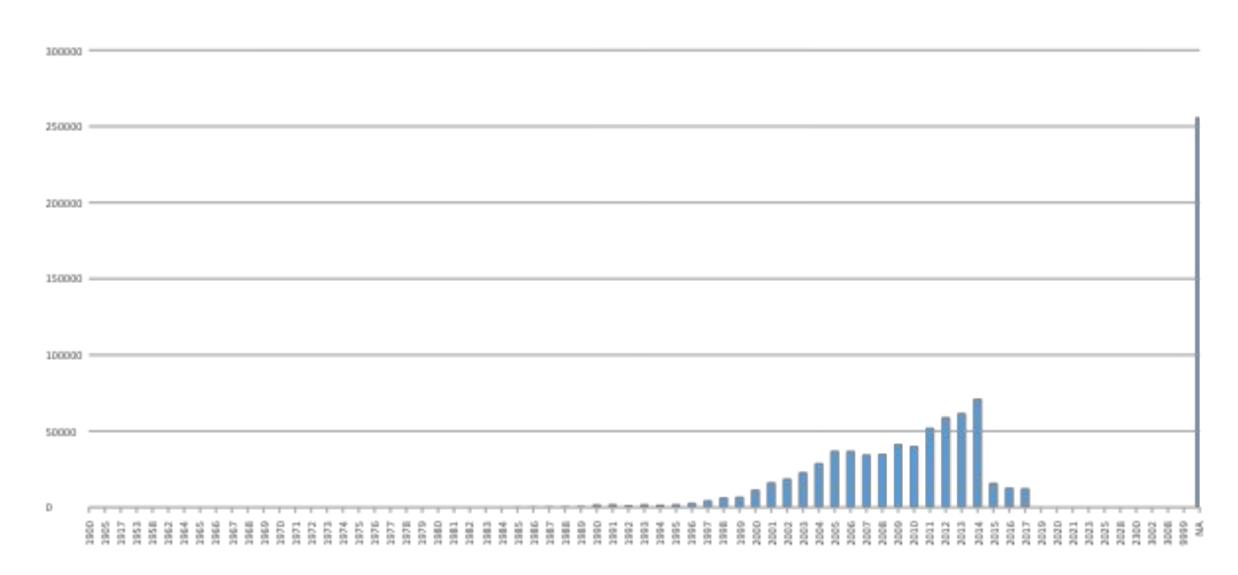
EDA – Top 10 Courts

• Chief Judicial Magistrate court has processed the highest number of cases.



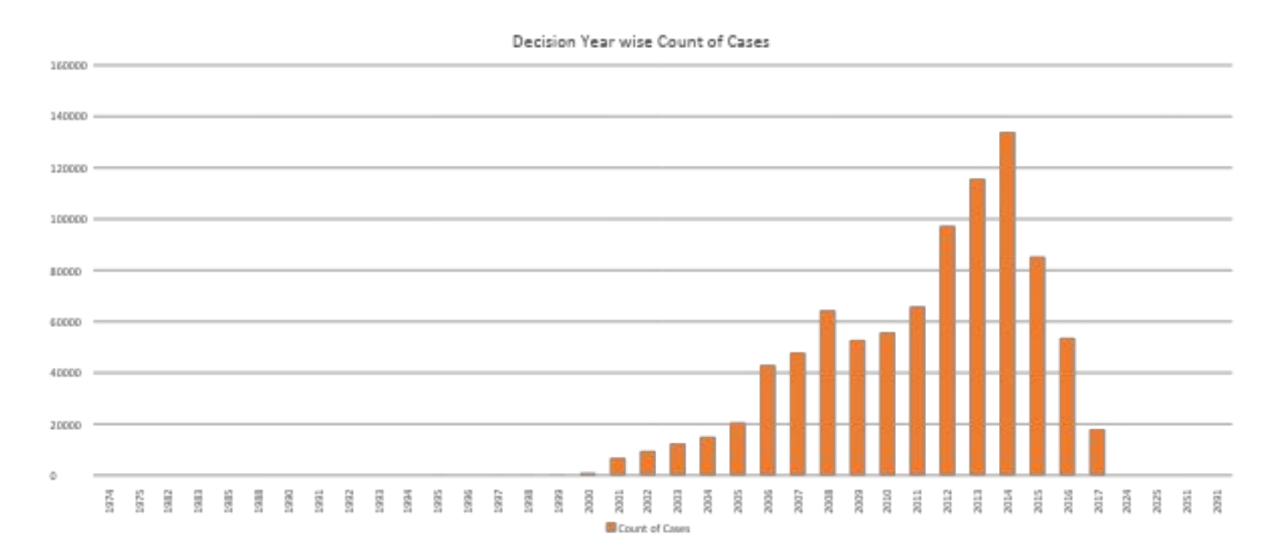
EDA – Date Filed Wise Cases

• There are missing values as well as few garbage/default values in date filed column.



EDA – Decision Year Wise Count of Cases

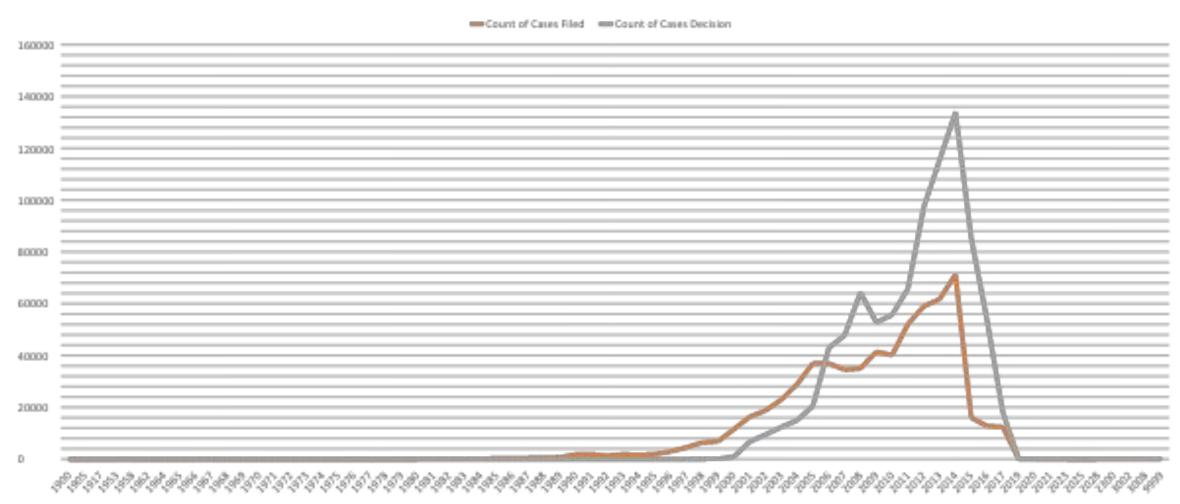
• Highest number of the cases in this data are resolved in year 2014.



EDA – Filed vs Decision of Cases Over Time

• As per this data, Over time No. of cases resolved in the courts has increased as compared to the filed cases.

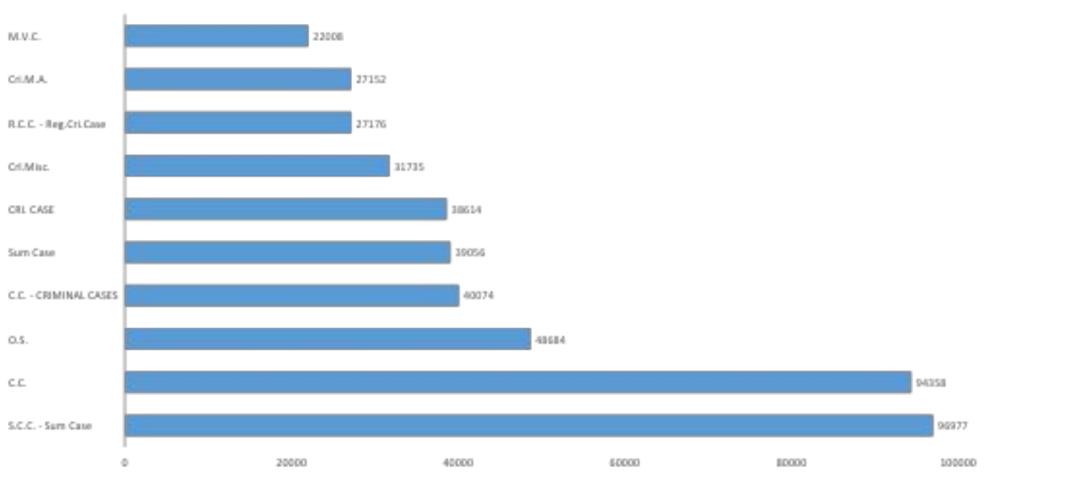
Year Wise Cases Filed vs Resolved



EDA – Top 10 Cases Type

• Sum Cases and Criminal are in top cases by count of cases filed.

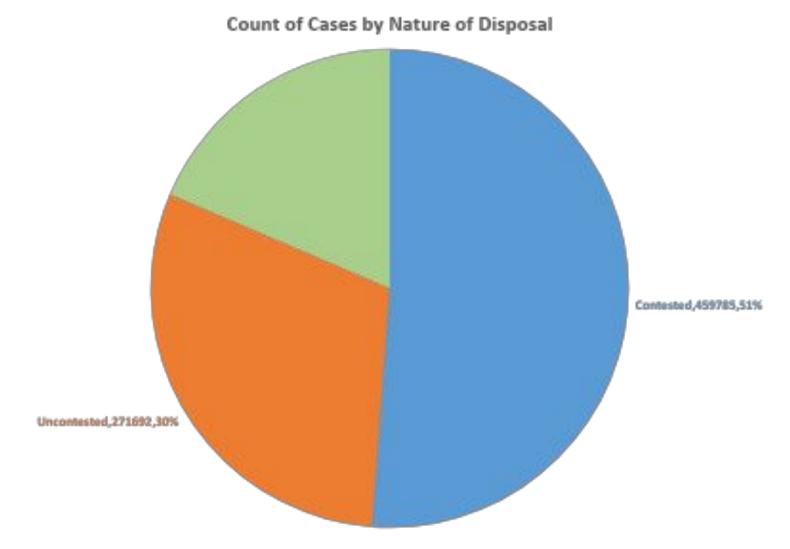




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EDA – Nature of Disposal

- Mostly Contested cases are disposed. Out of contested cases, most of them are given judgement or decided or dismissed.
- From Uncontested cases, most of them are compromised or transferred or dismissed.

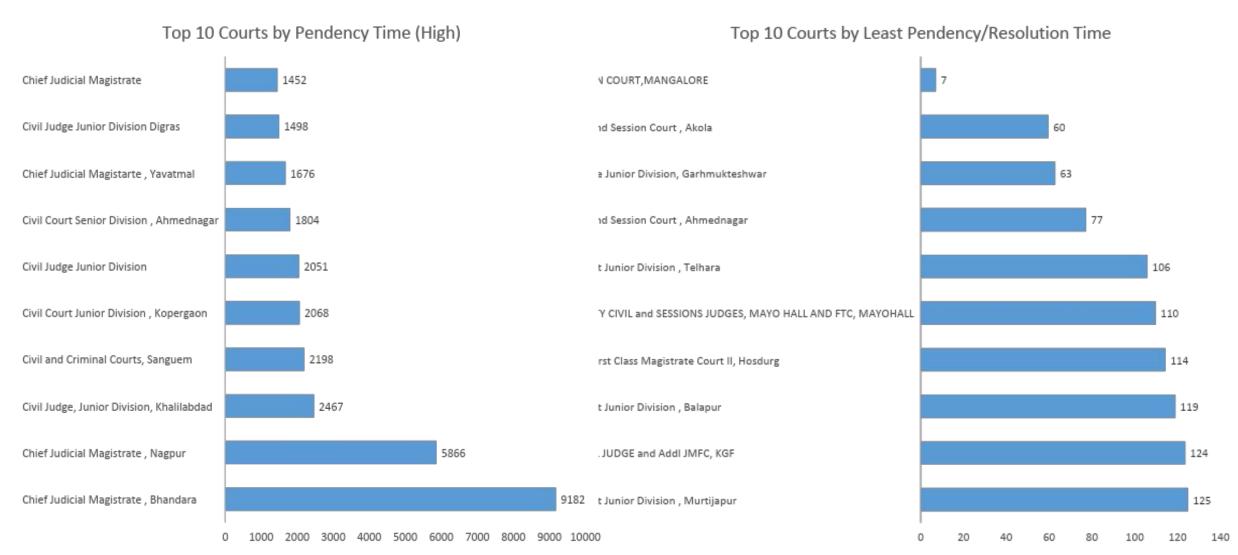


Pendency Time of Cases (Time to Decision)

- On an average pendency/decision time for the cases given is 1175 days.
- Case Types such as Trust Appeal, Small Cause Court, Examination Court, Arms Act, Land Ref. are having 4000+ days of pendency/resolution time.
- Bail Applications have the least decision time.
- Usually Contested Cases takes more time than Uncontested for the decision.

EDA – Courts by Pendency Time

• Bhandara and Nagpur CJM courts have high pendency time whereas Vacation Court Mangalore and DSC Akola have least resolution time.



Closing Note

- This is just a quick analysis of the data given, more insights can be surfaced by deep dive by finding the relations between different variables or establishing the causal relationships for pendency times etc.
- Through this data, we can observe important insights about cases journey and efficiency of the legal system in India.
- Mainly Pendency Time of the cases and Courts workload is quite obvious from this analysis.
- The different type of cases filed are also observed and analyzed.