

Hiring Process Analytics | Google | Akash Duwedi

Project Description

Hiring process is the fundamental and the most important function of a company. Here, the MNCs get to know about the major underlying trends about the hiring process. Trends such as- number of rejections, number of interviews, types of jobs, vacancies etc. are important for a company to analyse before hiring freshers or any other individual. Thus, making an opportunity for a Data Analyst job here too!

Being a Data Analyst, your job is to go through these trends and draw insights out of it for hiring department to work upon.

You are working for a MNC such as Google as a lead Data Analyst and the company has provided with the data records of their previous hirings and have asked you to answer certain questions making sense out of that data.

Approach

1. **Understand the Data:** Begin by thoroughly reviewing the data provided by Google. Familiarize yourself with the structure, format, and variables included in the dataset. Identify any missing data or data quality issues that may need to be addressed before proceeding with the analysis.
2. **Define Objectives and Questions:** Collaborate with the hiring department at Google to clarify the objectives of the analysis and determine the specific questions that need to be answered. This will help you focus your analysis and ensure that the insights you generate align with the organization's goals.
3. **Data Cleaning and Preparation:** Preprocess the data to ensure its quality and reliability. This may involve handling missing values, removing duplicates, standardizing formats, and transforming variables as necessary. Prepare the data in a format suitable for analysis, ensuring that it is organized and structured appropriately.
4. **Exploratory Data Analysis (EDA):** Conduct exploratory data analysis to gain initial insights into the hiring process trends. This involves summarizing and visualizing the data using various statistical and graphical techniques. Identify key patterns, trends, and outliers in the data that may require further investigation.
5. **Data Visualization:** Create visualizations, such as charts, graphs, and dashboards, to communicate your findings effectively. Visual representations can help stakeholders understand complex trends and patterns more easily, facilitating decision-making.
6. **Insight Generation:** Analyze the results of your statistical analysis and identify key insights and recommendations. These insights should address the questions posed by the hiring department and provide actionable recommendations to improve the hiring process. Focus on identifying areas of improvement, potential biases, or factors contributing to successful hiring outcomes.

Tech-Stack Used

- In this project, **Microsoft Excel 365** is utilized as the primary tool for data analysis and visualization. **Excel** is a widely used **spreadsheet software** that offers a range of functionalities for **data manipulation, analysis, and visualization**.

Additional Information Related To The Project:

- ❖ In this project, there is a total of 7,168 records available. After data cleaning, we found 6,758 useful records. This analysis is fully based on the useful records obtained after the data cleaning process.

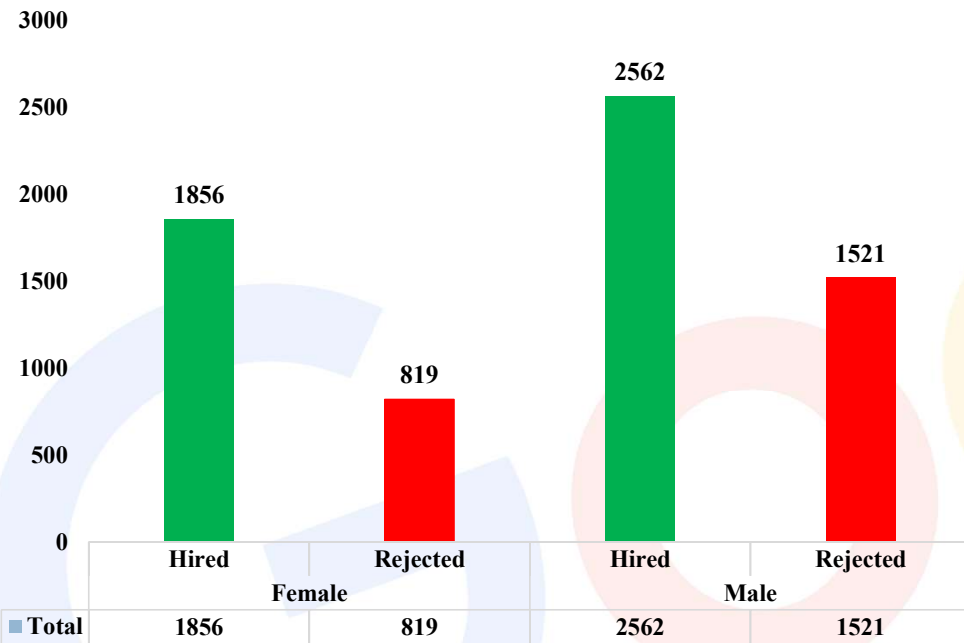
Task A

Hiring: Process of intaking of people into an organization for different kinds of positions.

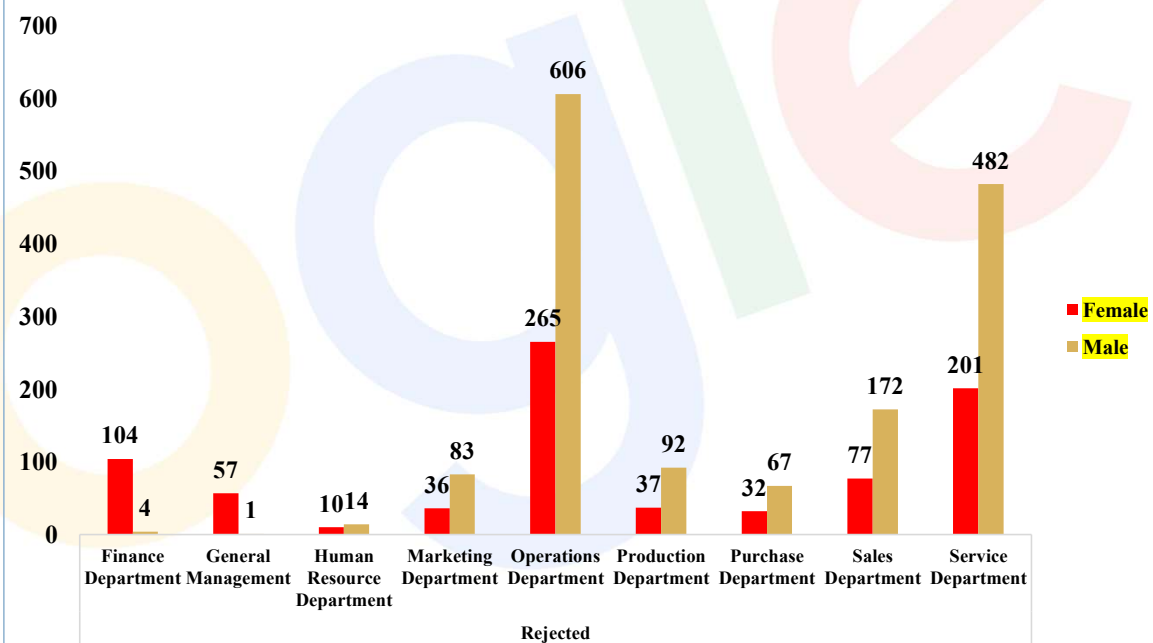
Your task: How many males and females are Hired ?

Task A - How many males and females are Hired ?

Hiring Status in the Company



Department wise number of employee rejected data



Insights: In this company, there are a total of 7,168 records. After data cleaning, we found 6,758 useful records. Upon analyzing these records, we discovered that a total of 1,856 females and 2,562 males were hired in this company. Additionally, 819 females and 1,521 males were rejected, as shown in the graphs above.

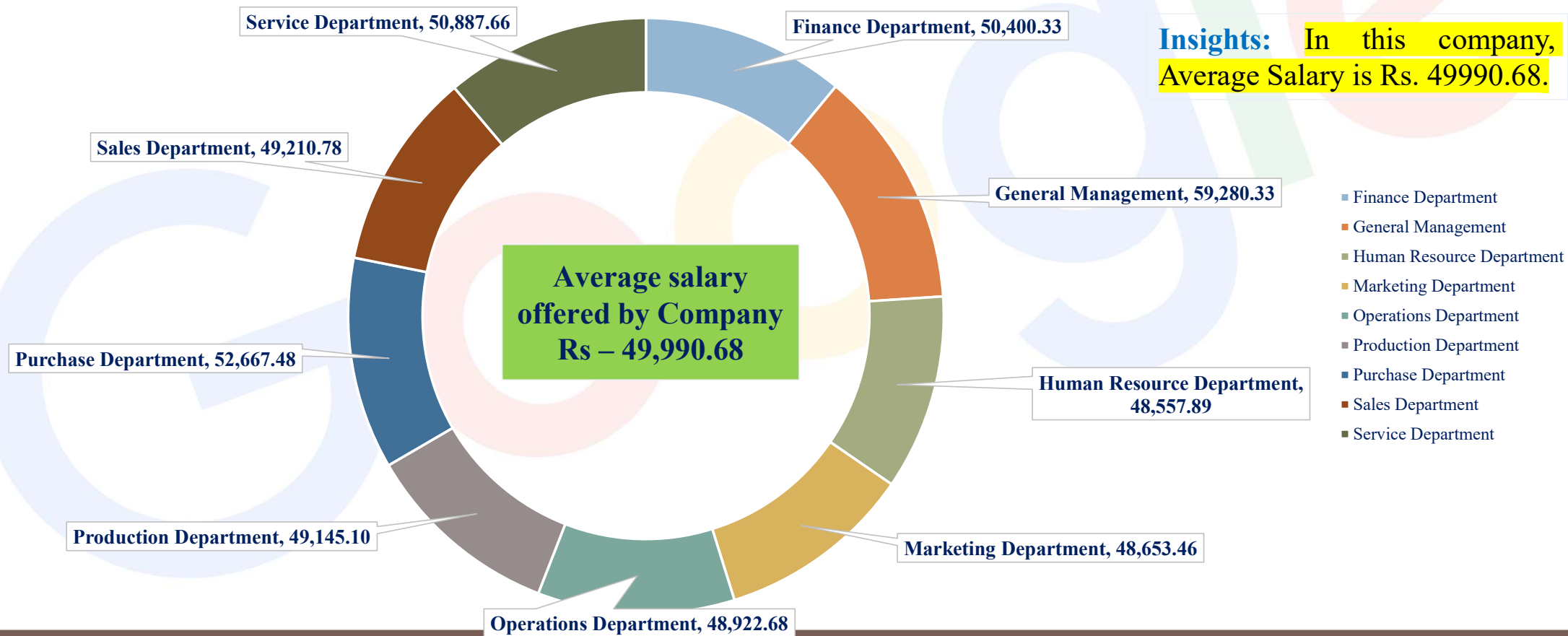
Task B

Average Salary: Adding all the salaries for a select group of employees and then dividing the sum by the number of employees in the group.

Your task: What is the average salary offered in this company ?

Task B - What is the average salary offered in this company ?

Department wise average salary offered in the company



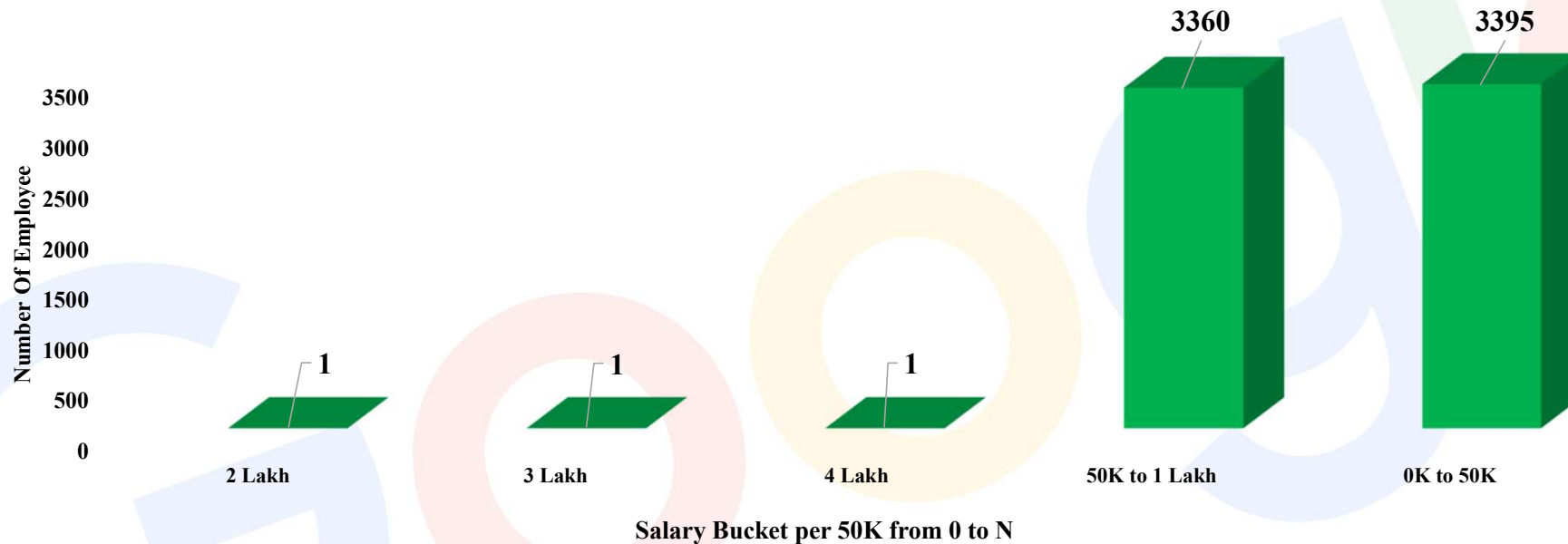
Task C

Class Intervals: The class interval is the difference between the upper class limit and the lower class limit.

Your task: Draw the class intervals for salary in the company ?

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Salary Based Class Intervals



Insights: In this company, there are a total of 7,168 records. After data cleaning, we found 6,758 useful records. Upon analyzing these records with 50k bucket class intervals, we discovered that one employee receives 4 lakh, one employee receives 3 lakh, one employee receives 2 lakh, and 3,360 employees receive a salary in the range between 50k to 1 lakh. Additionally, 3,395 employees receive a salary in the range between 0k to 50k.

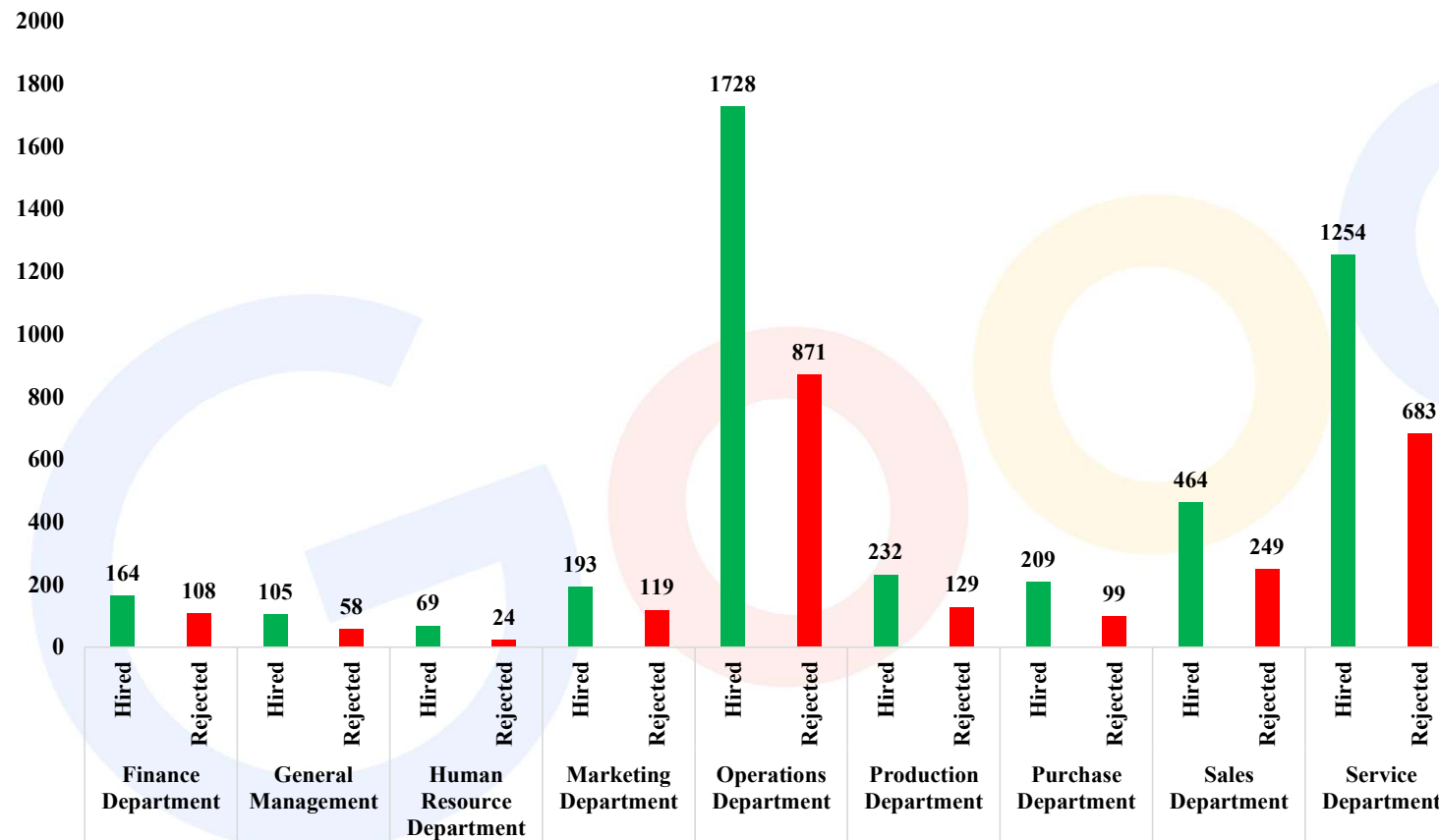
Task D

Charts and Plots: This is one of the most important part of analysis to visualize the data.

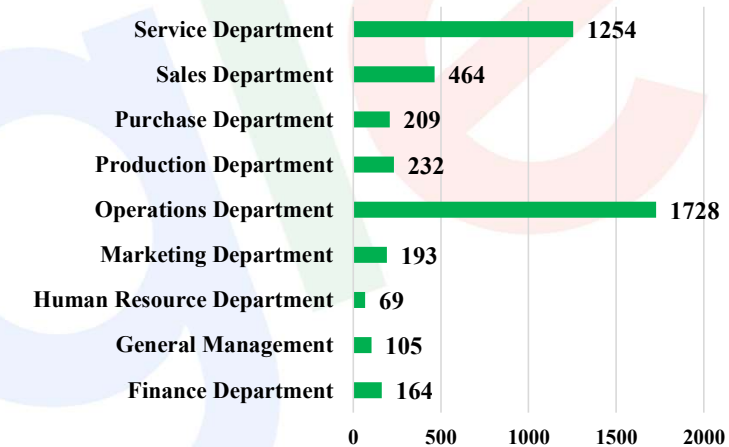
Your task: Draw Pie Chart / Bar Graph (or any other graph) to show proportion of people working different department ?

Task D - Draw Pie Chart / Bar Graph (or any other graph) to show proportion of people working different department ?

People working different departments (Hired & Rejected)



People working different departments



Insights: In this company, there are a total of 7,168 records. After data cleaning, we found 6,758 useful records. Upon analyzing these records, we created the above chart department-wise, as well as Hired and Rejected Employee-wise, for better understanding.

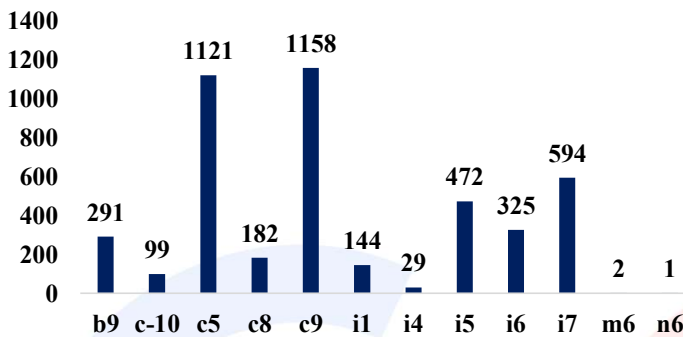
Task E

Charts: Use different charts and graphs to perform the task representing the data.

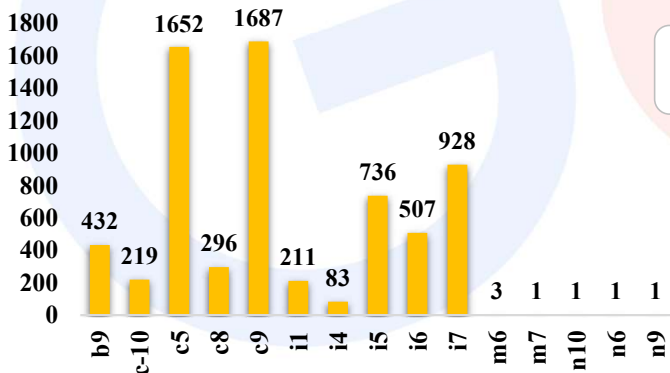
Your task: Represent different post tiers using chart/graph?

Task E - Represent different post tiers using chart/graph?

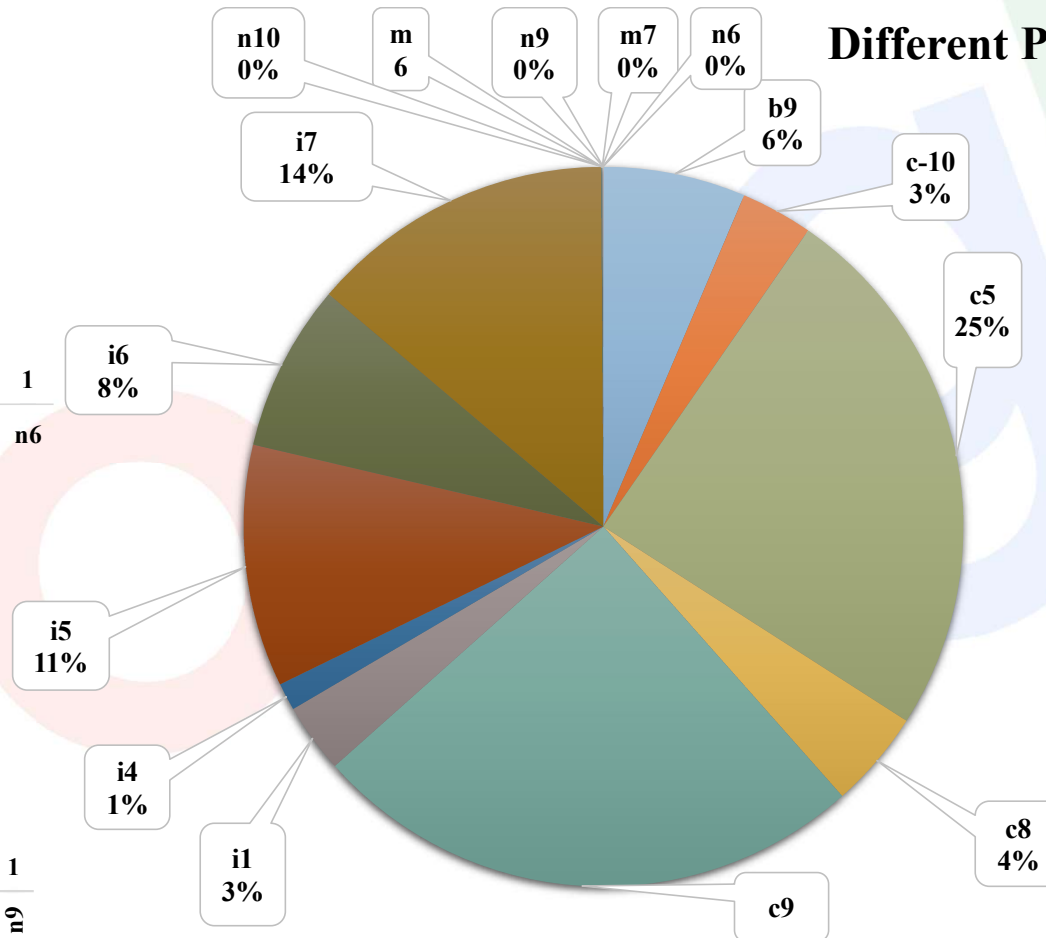
Different Post Tiers and Their Working Employees



Different Post Tiers With (Hired & Rejected Employee)



Different Post Tiers



Insights: In this company, there are a total of 7,168 records. After data cleaning, we found 6,758 useful records. Upon analyzing these records, we created the Bar & PI chart Different Post Tiers wise, as well as Hired and Rejected Employee-wise, for better understanding.

Results:

Throughout the project, as a lead Data Analyst at Google, I successfully analyzed the data records of the company's previous hirings, aiming to identify major underlying trends in the hiring process. By examining key metrics such as the number of rejections, interviews, types of jobs and Salary, I have drawn insightful conclusions to assist the hiring department in making informed decisions.

Thank You !

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