PROJECT 4: HIRING PROCESS ANALYTICS

DESCRIPTION: AS A DATA ANALYST IN MULTINATIONAL COMPANY LIKE GOOGLE OUR TASK IS TO ANALYZE COMPANY'S HIRING PROCESS DATA AND DRAW MEANINGFUL INSIGHTS FROM IT.

WE HAVE USED EXCEL TO SOLVE THE GIVEN TASKS AND EXTRACT THE INSIGHT

Handling Missing Data

▶ Handling missing data involves managing and addressing the absence of values in a dataset. It is a crucial step in data analysis and machine learning as missing data can adversely affect the validity and reliability of results. The goal is to choose appropriate strategies to either remove or fill in missing values, ensuring that the analysis or model is based on as complete and accurate data as possible.

Clubbing Columns

- If there are columns with multiple categories that can be combined, do so to simplify your analysis.

Outlier Detection & Removing Outliers

▶

Detecting outliers in a dataset is an important step in data analysis and is done to identify observations that deviate significantly from the overall pattern. Outliers can skew statistical analyses and machine learning models, so it's crucial to identify and handle them appropriately.

Data Analytics Tasks:

- Task A: Hiring Analysis

- The hiring process involves bringing new individuals into the organization for various roles.

- Your Task: Determine the gender distribution of hires. How many males and females have been hired by the company?
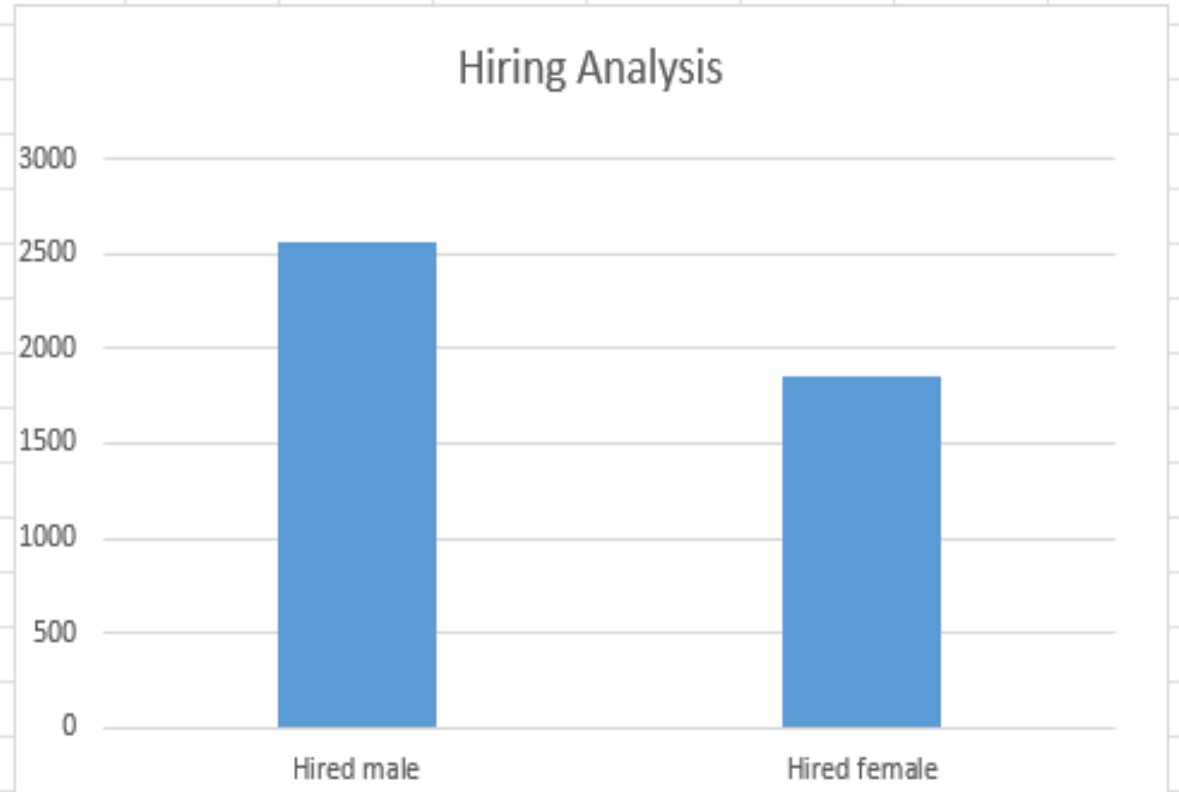
- INSIGHTS:

- With the help of pivot table we got to know the number of males and females hired
- More number of males are hired when compared to female

Task B: Salary Analysis

▶ The average salary is calculated by adding up the salaries of a group of employees and then dividing the total by the number of employees.

▶ Your Task: What is the average salary offered by this company? Use Excel functions to calculate this.

Average salary			49983.02902	

- Insights:
- We have calculated average salary using average function
- Average is 49983 after removing outliers

Task C: Salary Distribution

► Class intervals represent ranges of values, in this case, salary ranges. The class interval is the difference between the upper and lower limits of a class.

► Your Task: Create class intervals for the salaries in the company. This will help you understand the salary distribution.
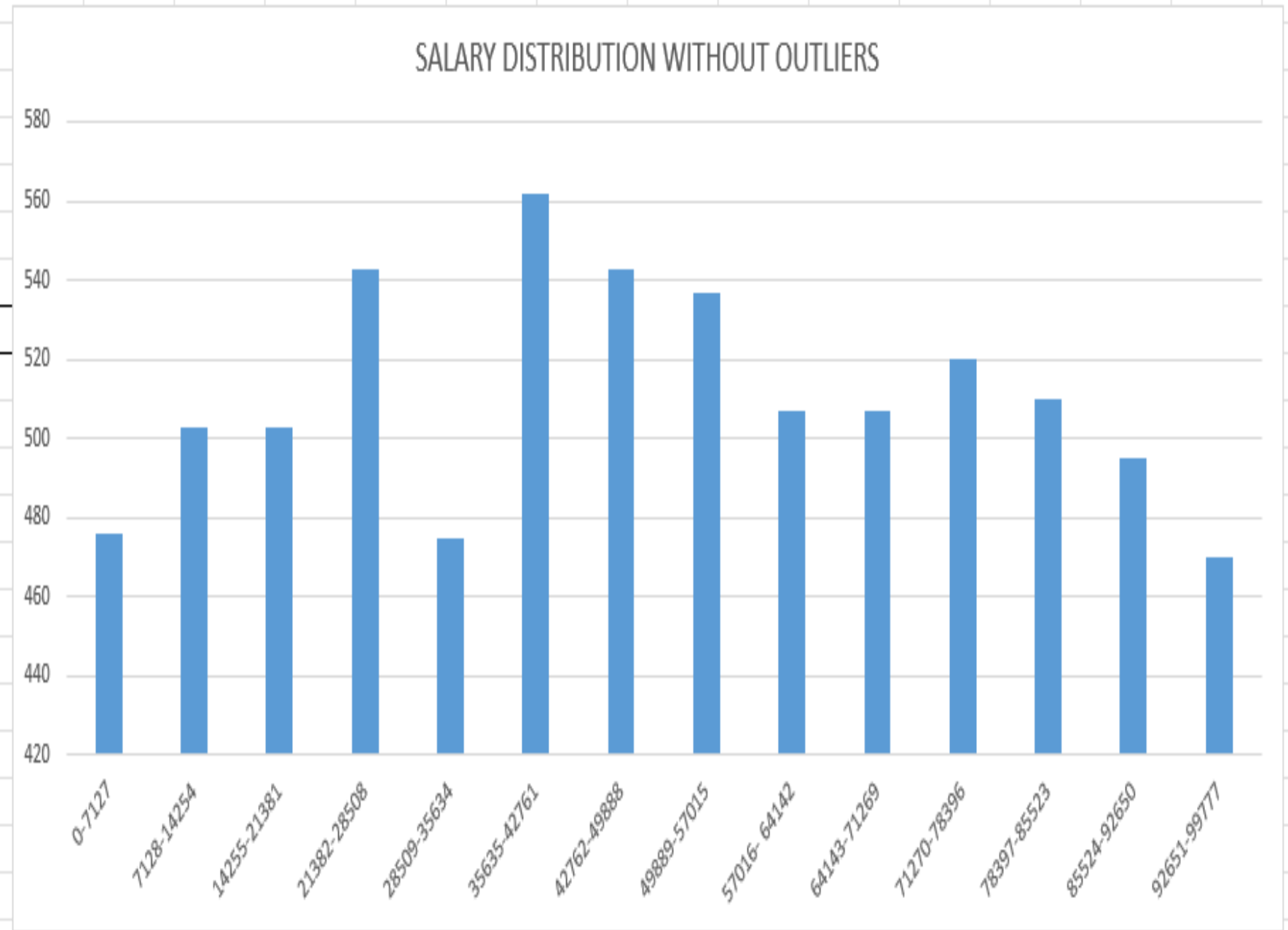
INSIGHTS: Salary Distribution

- We are having 14 class intervals
- Most of the employees have salary between 35635-42761
- And least number of employees have salaries between 92651-99777
- most of them have salaries near to average or less

Task D: Department Analysis

- Visualizing data through charts and plots is a crucial part of data analysis.

- Your Task: Use a pie chart, bar graph, or any other suitable visualization to show the proportion of people working in different departments.
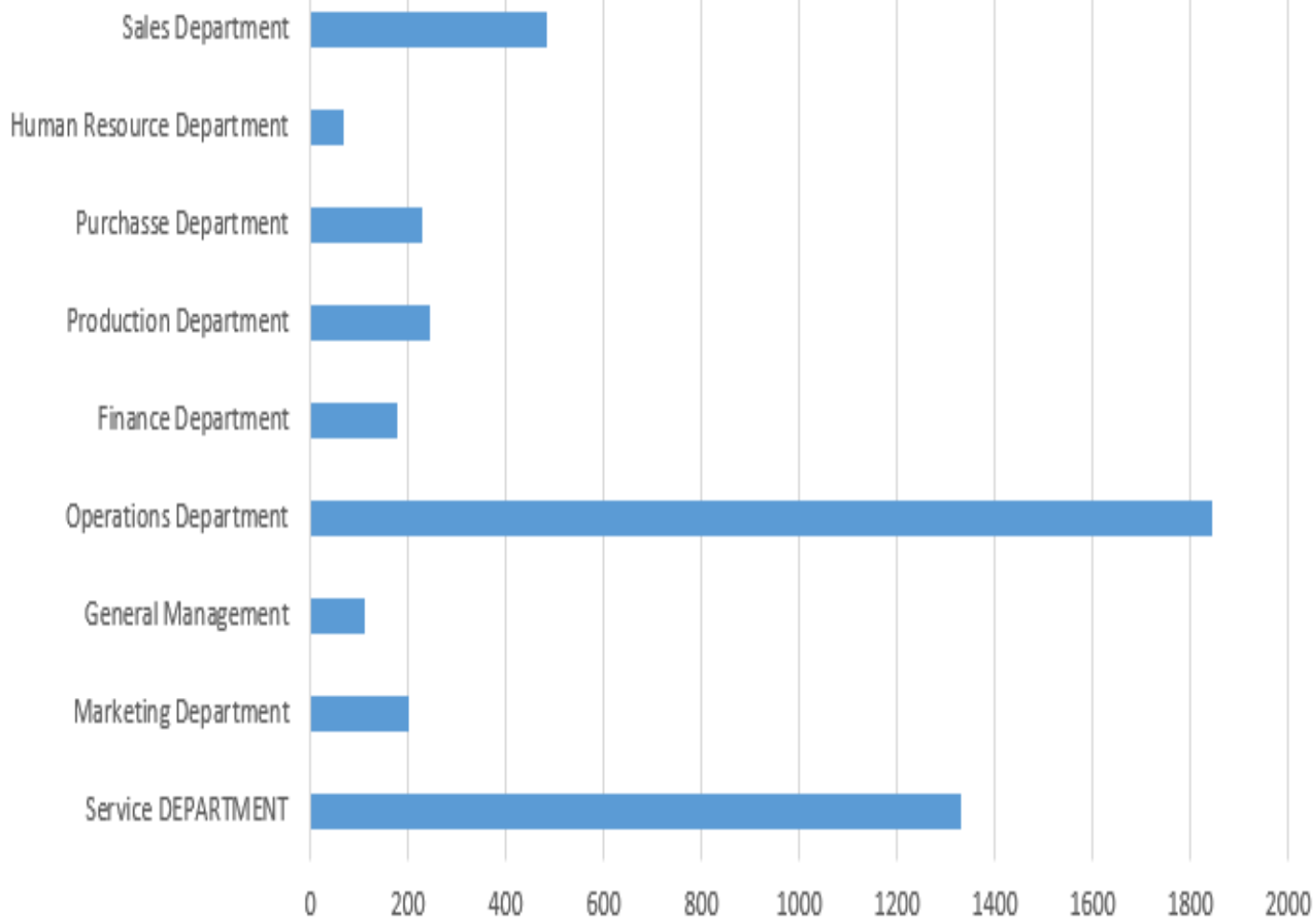
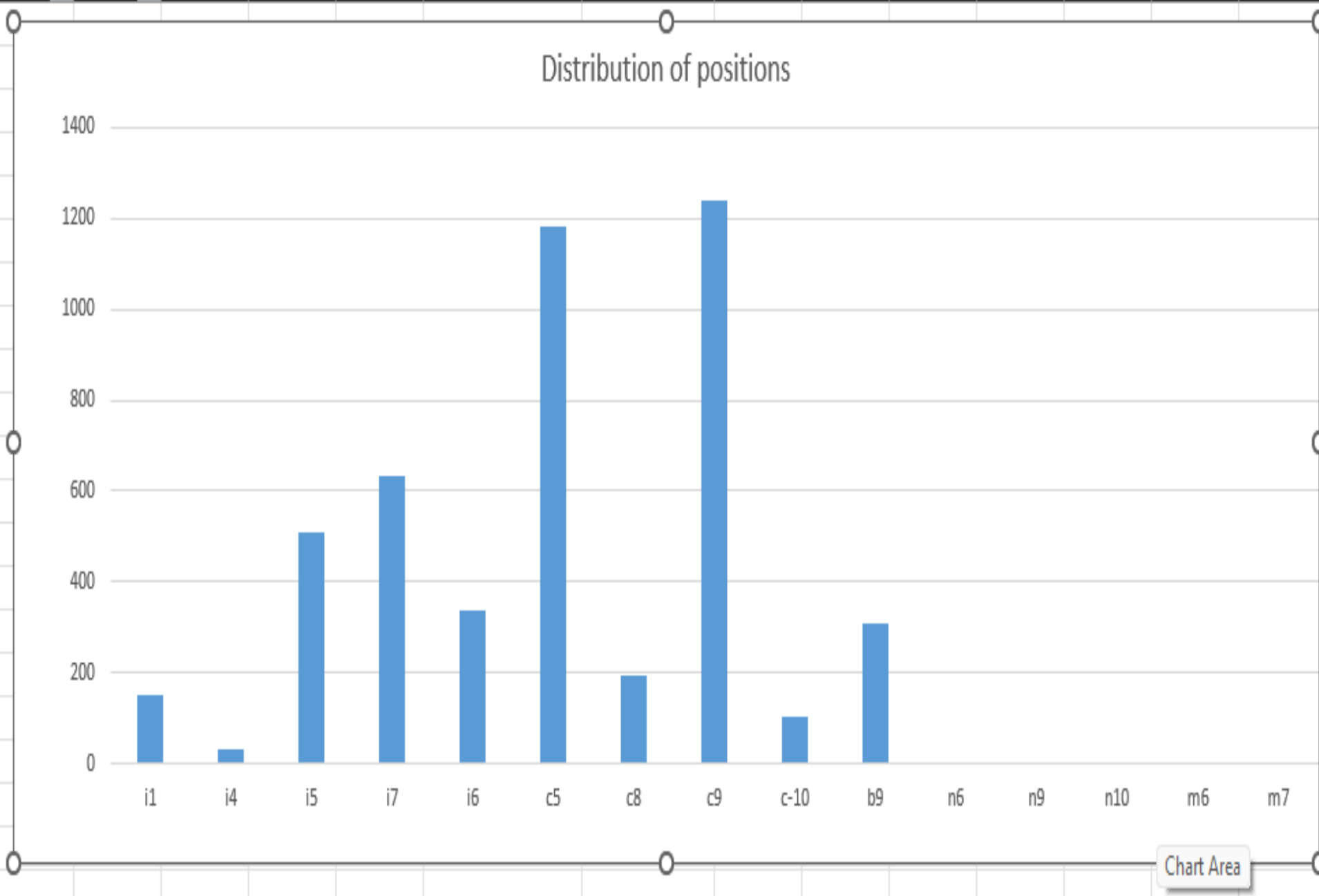| Column2	Column3	Column4
DEPARTMENTS	PEOPLE WORKING	
Service DEPARTMENT	1332	
Marketing Department	202	
General Management	113	
Operations Department	1843	
Finance Department	176	
Production Department	246	
Purchasse Department	230	
Human Resource Department	70	
Sales Department	485	

PEOPLE WORKING IN EACH DEPARTMENT

Insights:

- Operation department has the highest number of employees working

- Human Resource Department has the lowest number of employees working

- There is huge difference between the number of employees in Operation Department when compared to other departments.

Task E: position tier analysis

- Position Tier Analysis: Different positions within a company often have different tiers or levels.

- Your Task: Use a chart or graph to represent the different position tiers within the company. This will help you understand the distribution of positions across different tiers.

Different Tiers	Distribution of positions
i1	151
i4	32
i5	511
i7	635
i6	337
c5	1182
c8	193
c9	1239
c-10	105
b9	308
n6	1
n9	0
n10	0
m6	2
m7	0

Distribution of positions

Insights:

- ▶ C9 has the highest number of position distribution

- ▶ N9,n10,m7 doesn't have any position distribution

This is the hyperlink of the excel file which is used to solve the tasks

https://docs.google.com/spreadsheets/d/1Rk1m-VozMFy4W5PcMy6HAy1jRtoLGTvu/edit?usp=drivesdk&ouid=113826139200146158008&rtpof=true&sd=true