PROJECT DESCRIPTION

This project is about analysing hired and rejected applicants of a company. Hiring process is very vital for any company as it determines performance of a company based on what type of applicants are being hired.

In this project I have answered questions like:

A. **Hiring**: Process of intake of people into an organization for different kinds of positions.
Your task: How many males and females are hired?
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?
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?
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?
E. **Charts**: Use different charts and graphs to perform the task representing the data.
Your task: Represent different post tiers using chart/graph?

APPROACH

My approach to this project and problems is to first download the excel sheet provided in the portal. Next step for me is to go through the data set thoroughly and make sure I understand each column, each row, and it's purpose, their data type. Once I get the gist of the data set I will run descriptive statistics for the dataset that is finding out the mean, mode, median, standard deviation for the columns containing continuous values. After this I will find if there are any null values present in the dataset and if yes, then I will fill them using mean or median depending on the data set , if it has outliers or not. Since this data doesn't have outliers I had applied mean wherever needed.

TECH-STACK USED

Tech stack used for this project is **MS EXCEL.**

HIRING

- **Hiring**: Process of intake of people into an organization for different kinds of positions. **Your task**: How many males and females are hired?

By using
`=COUNTIFS(D2:D7169,"Male",C2:C7169,"Hired")`, and
`=COUNTIFS(D2:D7169,"Female",C2:C7169,"Hired")` respectively,
I found out the count of male and female hired by this company.

Gender	Number of Applicants Hired
Male	2563
Female	1856

Hired Male and Female count
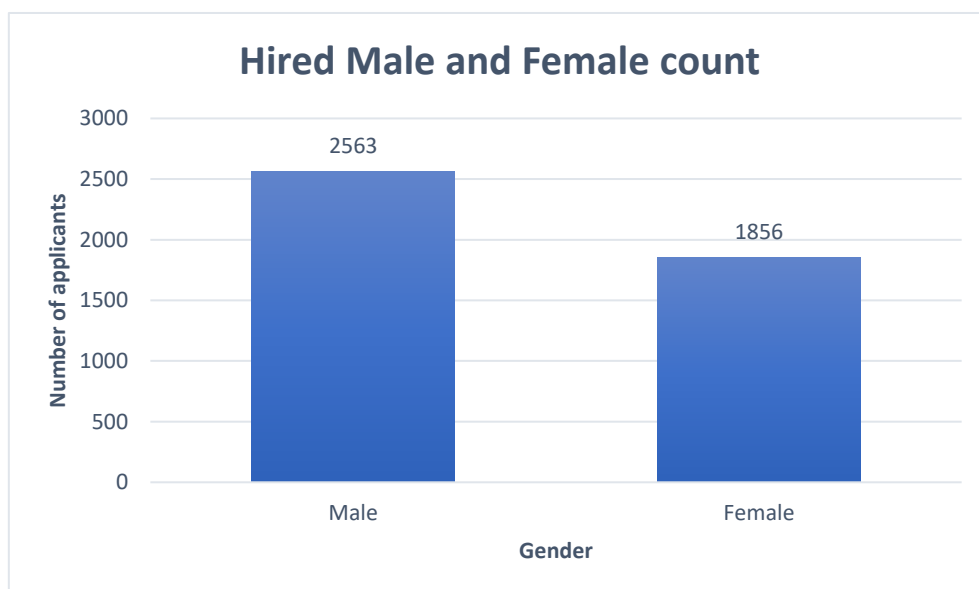
AVERAGE SALARY

- **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?

Here I first found out the mean of the salary column because if there is a null value I can fill it with the mean value.
Then after calculating mean value, which was 49,983 I filled it in the null value cell and calculated the average salary by using formula `=SUM(H2:H7169)/COUNT(H2:H7169)`.

Result for following formula for Average Salary is **49983.02902**

CLASS INTERVAL

- **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?

What I did here first is I calculated the upper and lower limit for the salary, which is 4,00,000 and 100 respectively. Now I divided the range into bins for class interval. Then I calculated the number of post occurring within the range by using formula `=COUNTIFS(H2:H7169, ">=lower_limit",H2:H7169,"<=upper_limit", C2:C7169,"Hired")`

Salary Range	Hired	Rejected	Total count of Post Name
0-23523	1086	571	1657
23524-47048	1161	578	1739
47049-70571	1116	585	1701
70572-94094	1088	584	1672
94095-117617	243	153	396
117618-141140	0	0	0
141141-164663	0	0	0
164664-188186	0	0	0
188187-211709	1	0	1
211710-235232	0	0	0
235233-258755	0	0	0
258756-305801	0	1	1
305802-329324	0	0	0
329325-352847	1	0	1
352848-376370	1	0	1
346371-400000	1	0	1
Total	4698	2472	7170

Range of Salary and count of Post

NAME: PARITOSH GANDRE
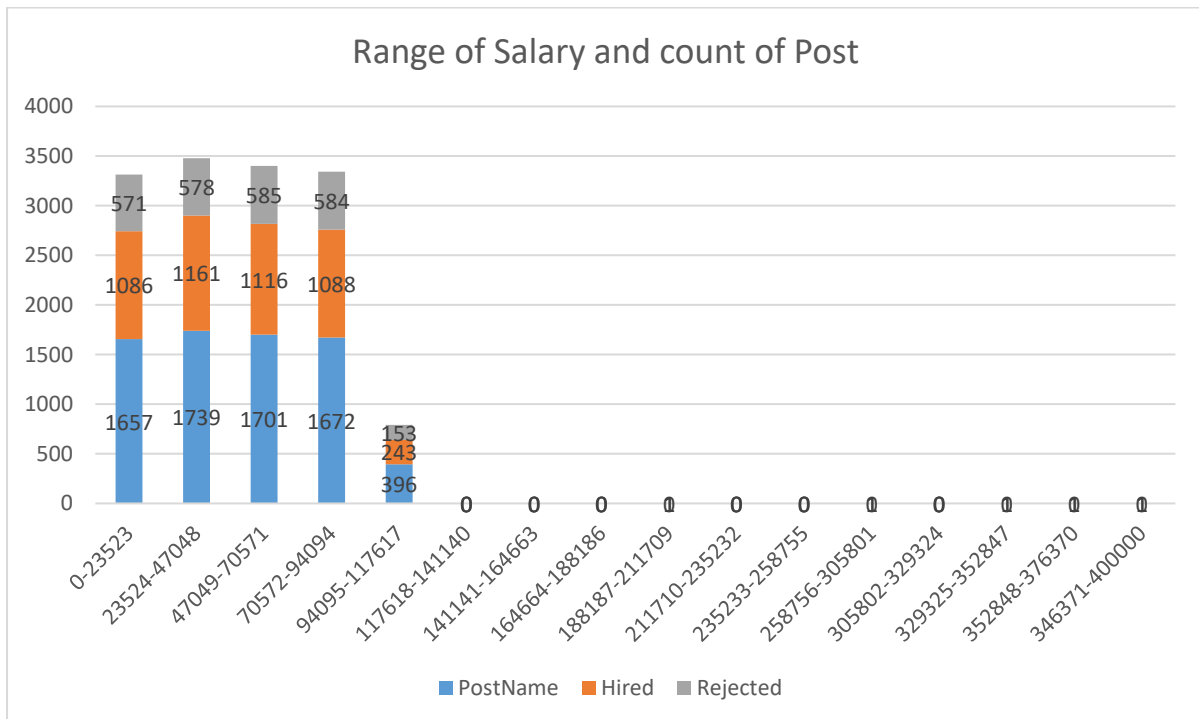
CHARTS AND PLOTS

- **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?

To find out proportion of people working in different departments, we have to find out total number of hired employees in each department by using the formula `=COUNTIFS(E2:E7169,"Service Department",C2:C7169,"Hired")`, instead of "Service Department" we will write name of each department and calculate the count.

Department	Hired Count	Rejected Count	Total
Service Department	1332	723	2055
Operations Department	1843	928	2771
Sales Department	485	262	747
Finance Department	176	112	288
Production Department	246	134	380
Purchase Department	230	103	333
Marketing Department	202	123	325
General Management	113	59	172
Human Resource Department	70	27	97
Total	4697	2471	7168

NAME: PARITOSH GANDRE
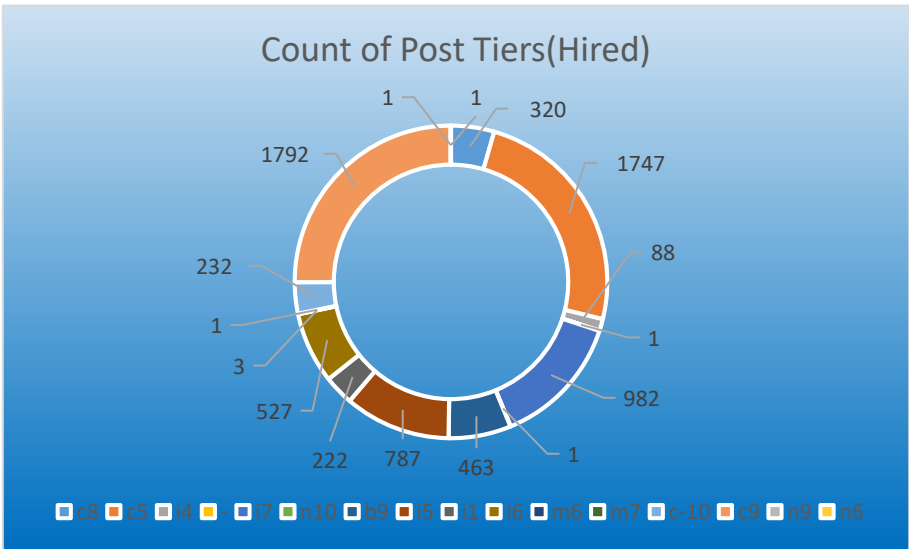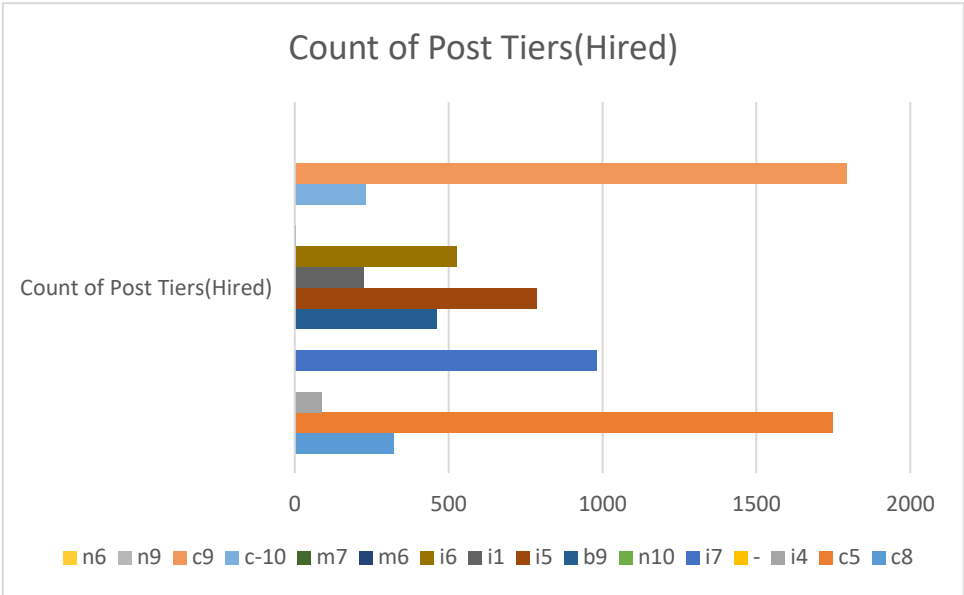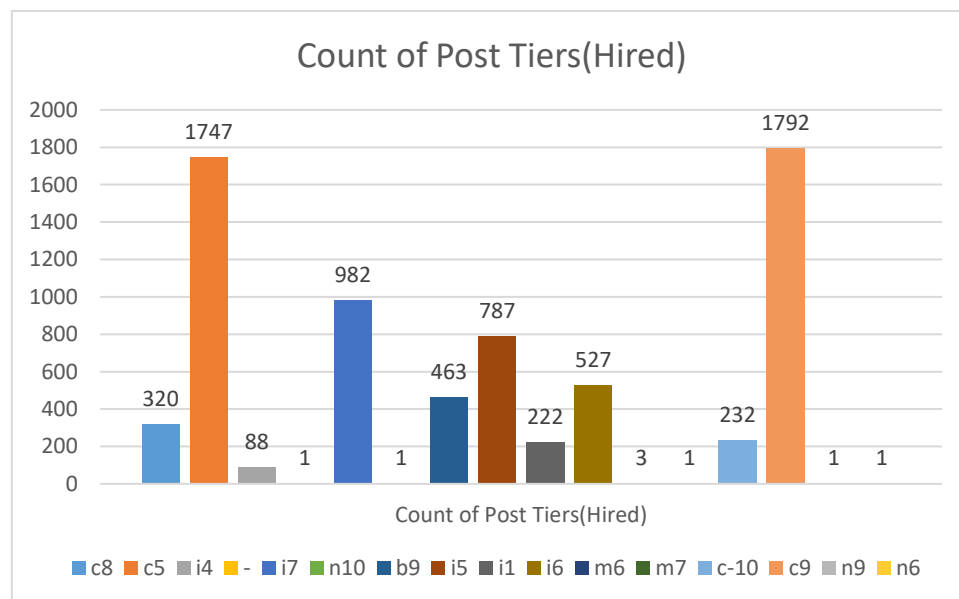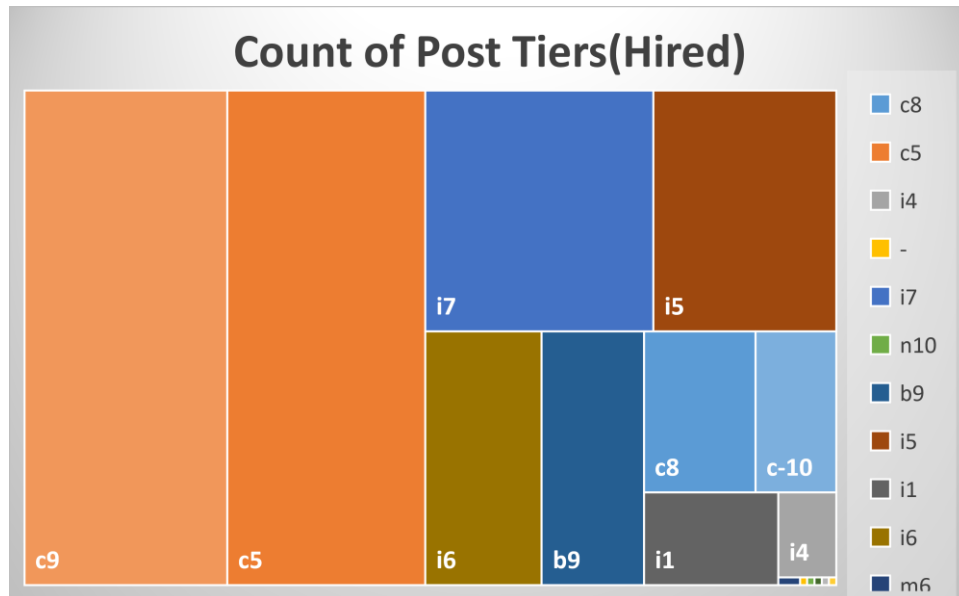
Hired Count Per Department
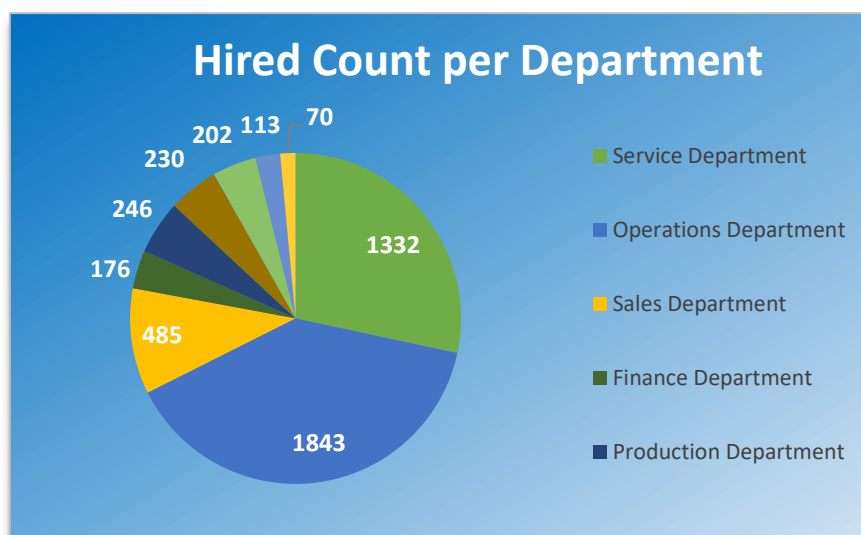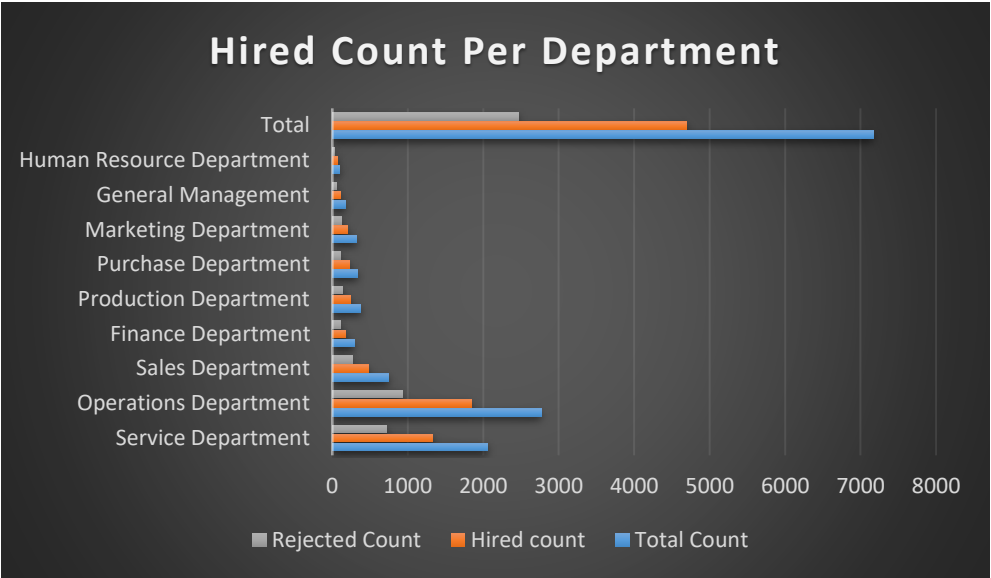
CHARTS

- **Charts**: Use different charts and graphs to perform the task representing the data.
  Your task: Represent different post tiers using chart/graph?

Here, to find out different post tiers, I firstly duplicated the 'Post Name' column and got rid of all the duplicate values, after which I am left with distinct values from that column. Then I calculated the number of employees hired by each department using formula `=COUNTIF(F2:F7169,"Post Name")`.

Post Name	Count of Post Tiers(Hired)
c8	320
c5	1747
i4	88
-	1
i7	982
n10	1
b9	463
i5	787
i1	222
i6	527
m6	3
m7	1
c-10	232
c9	1792
n9	1
n6	1
	7168

Count of Post Tiers(Hired)

Count of Post Tiers(Hired)

I have solved all the questions given for this project and implemented all the required statistics, charts and formulae to get the desired output.

In this project, all the methods including excel techniques and statistics have been implemented in Microsoft Excel.

THANK YOU