2. Provide a brief explanation of each visualisation and any key insights you observe

from the data.

a. Employee headcount by department.

The first bar chart displays the employee headcount for each department in descending order of the number of employees. The sales team has the most headcount, with the operations and marketing teams following closely behind. In contrast, the human resources team has the smallest number of employee. However, the difference from the sales team is relatively insignificant, accounting for only approximately 10%.

b. The salary distribution by role.

The boxplot provides a visual representation of salary distributions across various roles, facilitating easy salary comparisons. Evidently, the CEO role has the topmost salary bar, with the executive, manager, and associate roles following in descending order. The overall spreads are roughly similar across all roles. The central portion of data in each role appears symmetric, although there are a few potential outliers, particularly in manager roles.

c. Number of employees hired over time.

The line chart illustrates the number of employees hired over time. In general, it depicts an upward trend, with a gradual growth from January 2020 to July 2022, and a substantial surge thereafter.

d. Performance metrics (e.g., employee satisfaction ratings, average

performance scores) by department.

The final pair of bar charts show the average performance score and satisfaction rating for each department. Notably, the human resources team has the highest average performance score and satisfaction rating, while the finance team, on the other hand, has the lowest scores for both performance and satisfaction. The sales team holds the second position in terms of average performance score, but ranks second to last in average satisfaction rating. This suggests that performance score does not always directly correlate with satisfaction rating. In general, the average performance scores across all departments are relatively low, hovering around 5 out of 10, indicating that there is room for improvement. The same applies to the average satisfaction ratings.