Palmora group HR Analyst.  
The dataset has 1,015 employee records and contains the following columns:  
Name: Employee name  
Gender: Male, Female, or missing  
Department: Some missing (NaN)  
Salary: Some entries are NaN (especially for former employees)  
Location: Region (Lagos, Abuja, Kaduna)  
  
Rating: Performance rating (e.g., "Very Good", "Good", "Not Rated", etc.)  
  
Data Quality Notes:  
  
1. Missing Gender: 43 entries are missing gender.  
2. Missing Department: 28 entries have missing department.  
3. Missing Salary: 43 entries are missing salary — these are likely ex-employees and should be excluded as instructed.  
  
  
  
Next Steps:  
  
I will now clean the data by:  
Assigning a generic value ("Undisclosed") to missing genders.  
Dropping rows with missing departments (NaN).  
Dropping rows with missing salaries.  
Standardizing the Rating column if needed.  
The dataset has been cleaned successfully:  
✅ Total records after cleaning: 946 (from original 1,015)  
✅ Gender distribution:  
Male: 465  
Female: 441  
Undisclosed: 40  
❌ Removed:  
28 records with missing departments  
43 records with missing salaries  
  
Next Steps  
Based on the case study, I’ll now proceed with the following analyses:  
1. Gender Distribution overall, by Region and Department  
2. Ratings Analysis by Gender  
3. Salary Analysis:  
Gender Pay Gap overall, by Region and Department  
Minimum wage compliance ($90,000 threshold)  
Salary distribution in $10,000 bands overall and by Region  
4. Bonus Allocation (for this, I’ll need the second dataset Mr. Gamma shared — please upload that  
  
Here are the key insights from the gender distribution analysis:  
🔹 Overall Gender Distribution

The company is nearly balanced, with a slight male dominance (465 males vs 441 females).  
40 employees have undisclosed gender information.  
🔹 Gender Distribution by Region  
Lagos has the highest number of employees, and males slightly outnumber females.  
Abuja shows a more balanced gender distribution.  
Kaduna has more males than females.  
🔹 Gender Distribution by Department  
Engineering, Legal, and Manufacturing departments have a noticeable male dominance.  
Support and Admin departments lean more towards female employees.  
The Sales department appears fairly balanced.  
  
🔍 Insights: Performance Ratings by Gender  
  
The "Very Good" rating is the most common across all genders, with males slightly leading.  
For the "Excellent" rating, females are nearly equal to males.  
"Poor" and "Not Rated" categories show similar counts across genders.  
Undisclosed gender employees are represented across most ratings, but in smaller numbers, likely due to their lower headcount.  
There’s no significant evidence of gender-based rating bias at first glance, but deeper statistical analysis (e.g., average rating scores) can validate this further if needed.  
  
Gender pay gap by department and region  
Minimum wage compliance  
Salary distribution by $10,000 bands

💰 Gender Pay Gap Insights  
✅ Overall Average Salary by Gender:  
Male: $74,789.53  
Female: $72,135.69  
Undisclosed: $78,367.50  
🔎 Males earn ~$2,650 more than females on average — indicating a gender pay gap.  
  
  
  
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🏢 By Department (selected highlights):  
  
Engineering: Female avg. $75,422 > Male avg. $67,917 → reversed gap  
Legal: Female avg. $68,507 < Male avg. $72,998  
Marketing: Female avg. $79,108 > Male avg. $73,702  
Product Management: Female avg. $70,773 < Male avg. $76,10  
➡️ Pay gaps are not uniform — some departments favor females, others favor males.  
  
  
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📍 By Region:  
  
Lagos: Males earn more ($76,681 vs $74,163)  
Abuja: Males earn more ($73,246 vs $70,452)  
Kaduna: Males earn more ($74,850 vs $72,298)  
✅ The pay gap consistently favors males across all regions.  
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1. Compliance with $90,000 minimum wage  
2. Distribution of salaries in $10,000 bands, overall and by region  
The dataset contains the following columns for each employee:

Name

Gender

Department

Salary

Location

Rating

To calculate:

1. Bonus per individual – We need a bonus rule (e.g., percentage by rating).

2. Total per individual = Salary + Bonus.

3. Total payout per region and company-wide.

Please confirm or provide the bonus calculation rule. A common example:

Rating      Bonus % of Salary

Excellent   20%

Very Good   15%

Good  10%

Average     5%

Poor  2%

Not Rated   0%