

EXCEL INDEPENDENT PROJECT DATA INSTRUCTIONS

Read all assignment instructions carefully! When finished, compare your results to the grading rubric before submitting.

Student Learning Outcome

Students will apply what they have learned in a real-world scenario, utilize critical thinking skills to analyze data, and stretch the limits of their knowledge by summarizing data results to support a decision.

Project Overview

You work in the Human Resources department for Florida Central Hospital System. Your boss has given you the latest employment information on some of the medical staff and has asked you to analyze the data and answer three questions. You will summarize the results to all questions and support your conclusions using Excel data analysis techniques and skills such as formulas, sorting, filtering, total rows, PivotTables and/or PivotCharts.

Project Instructions

Open the **IP_Med_Data.xlsx**  workbook.

Save the file as **Lastname_Firstname_IP_Med_Data.xlsx**.

Read the three questions given below. Use your Excel skills to find the answer to the questions. Each question should be treated separately. In other words, question 1 is unrelated to the answer to question 2 or question 3.

You can organize any new results (pivot tables, pivot charts, summary formulas, etc.) however you would like, but make sure to identify all information so your results are clear. You may add new sheet(s) as needed to support the results of your analysis.

Format all sheets so they are professional looking and easy to read. Make sure each sheet is set to print on 1 page. This assignment is worth 100 points.

Documentation Sheet

Enter your name and the date.

After finishing your data analysis, come back to this sheet and summarize the answers to each question in a few sentences. Add a link to the “place in this document” that shows your supporting data analysis. (*Hint: A link has already been entered for question 3.*)

Employee Data - Questions 1 - 3

Use the information on the Employee Data sheet in cells a4:i60 to answer the following three questions.

1. **Determine how much the employer will have to contribute to the retirement plan for each department. Which department requires the highest total employer contribution?**

Hints: Use an IF function formula to calculate the employer contribution for employees who elected to participate in the company's retirement plan. If the employee said "Yes" in the Participates in Retirement Plan column, then the Employer Contribution would be the employee's Salary times the contribution rate shown in i2. Otherwise, the employer contribution would be zero. If needed, copy the formula. Format your formula results appropriately.

There are several ways to find the total contributions by departments, such as using SUMIF formulas or a PivotTable. You should place your results on a different sheet than the Employee Data sheet.

2. **What is the average salary by Gender and Job Title? Do males or females make more money? Is this the same for all job titles?**

Hints: You can answer this question with one PivotTable and/or Pivot Chart. Place your results on a different sheet than the Employee Data sheet.

3. **On the Employee Data sheet, show only the records and total number of medical staff in the ICU and Cardiology Departments who have worked here 10 years or more. Sort the list by Job Title in order of seniority (Registered Nurse, Physical Therapist, Surgical Tech and Paramedic) and then by Year Hired in ascending (smallest to largest) order. Hide the gender column as this information is confidential. Add conditional formatting to highlight the highest 5 salaries and the lowest 5 salaries.**

Review the results and summarize your findings on the Documentation sheet. How many employees were on the report? Did any of the employees have the highest and lowest salaries?

Do not delete any records or columns from the list as this is your original source data for all questions.

Hints: Your results should be displayed on the Employee Data sheet. Turn the data into a table. Use sort and filters on the existing data. Use a total row to show the count of the records displayed that meet the criteria. Use custom sort for the Job Title. Set two Conditional Formatting using Top/Bottom Rules – one for top 5 and another for bottom 5.

Grading Rubric

Your work will be graded on the following scale:

Description	Points
Overall	
All sheets, tables, charts, and results are clearly identified. All sheets are formatted professionally. Numbers are right aligned and formatted with appropriate number style. Labels are used identify all values. Borders, colors, fonts etc. are used appropriately so data is clear and easy to read.	10
All sheets are set to print on 1 page. The file is saved as Lastname_Firstname_IP_Med_Data.xlsx.	5
Documentation sheet:	
Includes name and current date.	5
Question 1	
IF formula created to calculate employers required contribution to retirement plan.	5
Totals contributions are shown by department. Results will update if data is sorted or edited.	10
On Documentation sheet, conclusions are summarized in 1 – 5 sentences. Link to supporting data is included.	5
Question 2	
Average Salary is shown by Gender and by Job Title. Results will update if data is sorted or edited.	15
On Documentation sheet, conclusions are summarized in 1 – 5 sentences. Link to supporting data is included.	5

Description	Points
Question 3	
Only ICU and Cardiology medical staff are shown.	5
Only employees who were hired 10 or more years are shown.	5
Records are sorted by Registered Nurse, Physical Therapist, Surgical Tech and Paramedic (custom sort) and by Year Hired in Ascending order (smallest to largest).	5
Gender column is hidden.	5
Total number of medical staff meeting criteria is shown.	5
Conditional formatting added to show 5 highest salaries.	5
Conditional formatting added to show 5 lowest salaries.	5
On Documentation sheet, conclusions are summarized in 1 – 5 sentences. Link to supporting data is included.	5
Total Points	100

Submissions

Attach the **Lastname_Firstname_IP_Med_Data.xlsx** and submit for grading.