Questions

1. **IF Function**:
   o Determine if employees are earning above or below $50,000. Use the IF function to display "Above" or "Below".
   o Using :-
   o **= IF((F2>50000),"Above","Below")**
2. **IFS Function**:
   o Assign a performance rating based on the number of project hours: "Excellent" for 50 or more hours, "Good" for 40-49 hours, "Average" for 30-39 hours, and "Poor" for below 30 hours.
   o Using : **-**
   o **=**
      IFS(J2>=50,"Excellent",AND(J2<=49,J2>=40),"Good",AND(J2<=39,J2>=30),"Avera ge",J2<30,"Poor")
3. **AND Function**:
   o Check if employees from the HR department and North region have sales above $15,000.
      Using:-
      = IF(AND(E2="HR",I2="North",F2>15000),"True","false")
4. **OR Function**:
   o Identify employees who are either in the IT department or have a salary above $60,000.
      Using:-
      = IF(OR(E2="IT",F2>60000),"True","false")
5. **NOT Function**:
   o Determine if employees are not from the Marketing department.
   o Using:-
   o **= IF(NOT(E2<>"Marketing"),"True","false")**
6. **SUMIF Function**:
   o Calculate the total salary of employees from the Sales department.
   o Using:-
   o **=SUMIF(E2:E201,"Sales",F2:F201)**
      Answer:- 1813735
7. **SUMIFS Function**:
   o Calculate the total salary of employees in the IT department who have more than 35 project hours.
   o Using:-
   o **=SUMIFS(F2:F201,E2:E201,"IT",J2:J201,">=35")**
      Answer:- 1629219
8. **COUNTIF Function**:
   o Count the number of employees in the HR department.
   o Using:-
   o **=COUNTIF(E2:E201,"HR")**
   o **Answer:-44**
9. **COUNTIFS Function**:
   o Count the number of female employees in the Finance department.
   o **Using:_**
   o **=COUNTIFS(D2:D201,"F",E2:E201,"Finance")**
   o **Answer:-22**
10. **AVERAGEIF Function**:
    o Find the average salary of employees in the Marketing department.
    o Using:-
    o **=AVERAGEIF(E2:E201,"Marketing",F2:F201)**
       Answer:- 53389.47368

11. **AVERAGEIFS Function**:
    - Find the average sales for employees in the North region with project hours above 40.
    - **Using:- =AVERAGEIFS(H2:H201,I2:I201,"North",J2:J201,">40")**
      Answer:- 22015.65217
12. **MAXIFS Function**:
    - Determine the maximum salary among employees in the South region.
    - **Using:- =MAXIFS(F2:F201,I2:I201,"South")**
      Answer:- 77358
13. **MINIFS Function**:
    - Find the minimum number of project hours for employees in the Finance department.
    - **Using:- =MINIFS(J2:J201,E2:E201,"Finance")**
    - **Answer:-22**
14. **VLOOKUP Function**:
    - Use VLOOKUP to find the salary of an employee based on their ID.
    - **Using:- = VLOOKUP(A2,Sheet1!A2:J201,6,FALSE)**
15. **HLOOKUP Function**:
    - Use HLOOKUP to find the joining date of employees based on their department.
    - **Using:- = =HLOOKUP(G2,G2:G201,MATCH(I222,E2:E201,0))**
    - **Answer :- For Dept ="IT" date is 6-7-2021**
16. **INDEX and MATCH Functions**:
    - Use INDEX and MATCH to find the sales amount for a specific employee.
    - Using:- = INDEX(H2:H202, MATCH(H226, B2:B202, 0))
    - Answer:- For Employee name "Heather cook"
    - Sales is 17883
17. **Conditional Formatting**:
    - Highlight cells in the Salary column that are above $60,000.
    - Range:-F2:F201
    - Value is greater than 60000
18. **Pivot Table**:
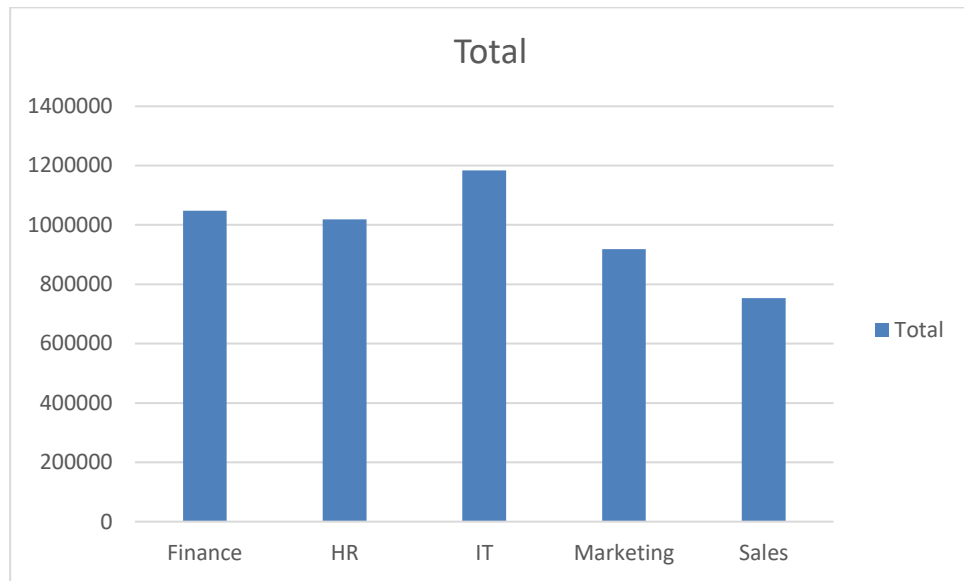   - Create a pivot table to summarize average sales by region and department.

Average of Sales	Column Labels				
Row Labels	East	North	South	West	Grand Total
Finance	21695.25	25643.8	25144.54545	25450.9	24369.30233
HR	28007.4	23668	21239.91667	20289	23147.27273
IT	26365.25	27001.66667	28201.22222	28969.9	27532.86047
Marketing	21329.22222	23127.72727	28375.08333	21917.83333	24167.78947
Sales	27965.25	21239.375	26815	19889.7	23544.5
Grand Total	24950.68627	24329.34615	25733.42	23357.25532	24610.365

19. **Data Validation**:
    - Set up data validation to allow only dates after 2015-01-01 in the Joining Date column.
    - Range:- G2:G201
    - Date is after 2015-01-01
20. **Chart Creation**:
    - Create a bar chart to visualize the total sales by department.