

1. Write a formula to check if the marks in cell are greater than or equal to 40. If yes, return B2 "Fail".?

Student Name	Marks
Riya	45
Siya	72
Raju	55
Rahul	80
Ram	30

→ To check if the marks in cell **B2** are greater than or equal to 40:

- **Formula:** `=IF(B2>=40, "Pass", "Fail")`
- **Results for the table:**
  - Riya (45): Pass
  - Ram (30): Fail

C2					
	A	B	C	D	
1	Student Name	Marks	Result		
2	Riya	45	Passed		
3	Siya	72	Passed		
4	Raju	55	Passed		
5	Rahul	80	Passed		
6	Ram	30	Failed		

2. A company gives a bonus if sales are above 40,000 and attendance is greater than or equal to 90%. Write a formula to calculate whether the employee will get a bonus or not.

Employee	Sales	Attendance
Arjun	55000	95
Simran	65000	85
Rohit	30000	90
Anjali	25000	65

→ A bonus is granted if sales are > 40,000 and attendance is ≥ 90%.

- **Formula:** `=IF(AND(B2>40000, C2>=90%), "Bonus", "No Bonus")`
- **Results for the table:**
  - **Arjun:** Bonus (55,000 sales, 95% attendance)
  - **Simran:** No Bonus (Attendance < 90%)
  - **Rohit:** No Bonus (Sales < 40,000)
  - **Anjali:** No Bonus (sales<40000, attendance < 90%)

D2								
	A	B	C	D	E	F	G	H
1	Employee	Sales	Attendance	Result				
2	Arjun	55000	95	Bonus				
3	Simran	65000	85	No Bonus				
4	Rohit	30000	90	No Bonus				
5	Anjali	25000	65	No Bonus				
6								
7								

3. Write a nested IF formula:

If marks in B2 are ≥ 90 → "A" , ≥ 75 → "B" , ≥ 50 → "C" , otherwise "Fail".

Student Name	Marks
Raj	85
Neha	96
Vivek	57
Rani	92
Sneha	75

→ To assign grades based on marks in cell B2:

- **Formula:** `=IF(B2>=90, "A", IF(B2>=75, "B", IF(B2>=50, "C", "Fail")))`

- **Results for the table:**

- Neha (96): A
- Raj (85): B
- Vivek (57): C
- Rani (92): A
- Sneha(75): B

C2    :    ✕    ✓    *fx*    =IF(B2>=90, "A", IF(B2>=75, "B", IF(B2>=50, "C", "Fail")))

	A	B	C	D	E	F	G	H
1	<b>Student Name</b>	<b>Marks</b>	<b>Result</b>					
2	Raj	85	B					
3	Neha	96	A					
4	Vivek	57	C					
5	Rani	92	A					
6	Sneha	75	B					
7								

4. Find the **Department** of Employee ID = E103. Also explain which LOOKUP function is used and why?

EmpID	Name	Department
E101	Raju	IT
E102	Riya	HR
E103	Roshni	Finance
E104	Sejal	Sales

→ To find the department for **EmpID E103**:

- **Formula:** =VLOOKUP("E103", A2:C5, 3, FALSE)
- **Result:** Finance
- **Explanation:** **VLOOKUP** is used because the data is organized vertically and the unique identifier (EmpID) is in the leftmost column of the range.

D3    X ✓ *fx*    =VLOOKUP("E103", A2:C5, 3, FALSE)

	A	B	C	D	E	F
1	<b>EmplID</b>	<b>Name</b>	<b>Department</b>			
2	E101	Raju	IT			
3	E102	Riya	HR	Finance		
4	E103	Roshni	Finance			
5	E104	Sejal	Sales			
6						

5. A company has set the following **commission structure** for its sales team:

Sales Amount	Commission Rate
0	5%
20000	10%
50000	15%
80000	20%

If a salesperson achieves **sales of ₹45,000**, use the **VLOOKUP function** to determine the **commission rate** applicable.

→ To determine the commission rate for sales of **₹45,000**:

- **Formula:** =VLOOKUP(45000, A2:B5, 2, TRUE)
- **Result:** 10% (Since 45,000 is between 20,000 and 50,000)

C2    X ✓ *fx*    =VLOOKUP(45000, A2:B5, 2, TRUE)

	A	B	C	D
1	<b>Sales Amount</b>	<b>Commission Rate</b>		
2	0	5%	10.00%	
3	20000	10%		
4	50000	15%		
5	80000	20%		
6				

6. The HR department maintains the following leave records of employees:onus or not.

Employee Name	Leaves Taken	Leaves Allowed
Alex	10	12
Bob	10	15
Anna	8	12

Write an **IF function** to check whether an employee has **Exceeded** their allowed leave balance.

- If **Leaves Taken > Allowed Leaves**, display **"Exceeded"**.
- Otherwise, display **"OK"**.

→ To check if an employee exceeded their allowed leaves:

- **Formula:** `=IF(B2>C2, "Exceeded", "OK")`
- **Results for the table:**
  - Alex (10/12): OK
  - Bob (10/15): OK
  - Anna (8/12): OK

D2	⌵	:	✕	✓	<i>fx</i>	=IF(B2>C2, "Exceeded", "OK")
	A	B	C	D		
1	Employee Name	Leaves Taken	Leaves Allowed			
2	Alex	10	12	OK		
3	Bob	10	15	OK		
4	Anna	8	12	OK		
5						

7. Find the salary of EmpID = E105 using **INDEX-MATCH Function**.

EmpID	Salary
E104	55000
E105	72000
E106	62000
E102	41000

→ To find the salary of **EmpID E105**:

- **Formula:** `=INDEX(B2:B5, MATCH("E105", A2:A5, 0))`
- **Result:** 72,000

C2		⌵	:	✕	✓	<i>fx</i>	=INDEX(B2:B5, MATCH("E105", A2:A5, 0))
	A	B	C	D	E	F	G
1	EmpID	Salary					
2	E104	55000	72000				
3	E105	72000					
4	E106	62000					
5	E102	41000					

C2		✖	✓	<i>fx</i>	=XLOOKUP("E303", A2:A5, B2:B5)		
	A	B	C	D	E	F	
1	<b>EmpID</b>	<b>Salary</b>					
2	E101	HR	IT				
3	E303	IT					
4	E106	Sales					
5	E301	Finance					
6							