

## **Experiment No. 1.1**

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**Branch:** MCA – CCD  
**Semester:** III  
**Subject Name:** Business Analytics

**UID:** 22MCC20177  
**Section/Group:** MCD-1/ Grp A  
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**Subject Code:** 22CAH-703

### **1. Aim/Overview of the practical:**

- a) Formatting the worksheet using logical formula IF Statement, Nested IF, AND, OR, NOT, IFERROR, SUMIF, AVERAGEIF, COUNTIF and AVERAGEIF)
- b) Create and apply formulas as per user requirements.

### **2. Code for practical:**

- Performing following formula for following table.

<b>Student Name</b>	<b>Marks</b>
John	85
Emily	92
Michael	78
Sarah	88
David	95
Jessica	70
Daniel	83
Olivia	32
Liam	45
Sophia	48

- **IF Statement:** To check if marks are greater than 50 for, then print PASS else FAIL.

**=IF(D5>50, "PASS", "FAIL")**

Student Name	Marks	Pass/Fail
John	85	Pass
Emily	92	Pass
Michael	78	Pass
Sarah	88	Pass
David	95	Pass
Jessica	70	Pass
Daniel	83	Pass
Olivia	32	Fail
Liam	45	Fail
Sophia	48	Fail

- **NESTED IF:** To enter grades, we use nested if to provide grades.

**=IF(AND(D6>=80, D6<=100), "Distinction", IF(AND(D6>=60, D6<=79), "Passed", "FAIL"))**

Student Name	Marks	Grade
John	85	Distinction
Emily	92	Distinction
Michael	78	Passed
Sarah	88	Distinction
David	95	Distinction
Jessica	70	Passed
Daniel	83	Distinction
Olivia	32	FAIL

- **AND:** If marks are greater than equal 80 and less than equal to 100, print Distinction, if marks are greater than equal to 60 and less than equal to 79.

**=IF(AND(D6>=80, D6<=100), "Distinction", IF(AND(D6>=60, D6<=79), "Passed", "FAIL"))**

Student Name	Marks	Pass/Fail	Grade
John	85	Pass	Distinction
Emily	92	Pass	Distinction
Michael	78	Pass	Passed
Sarah	88	Pass	Distinction
David	95	Pass	Distinction
Jessica	70	Pass	Passed
Daniel	83	Fail	Distinction
Olivia	32	Pass	FAIL

- **OR:** If marks are greater than equal 80, print Distinction, if marks are greater than equal to 60 or less than equal to 79.

**=IF(OR(D5>=80), "Distinction", IF(OR(D5>=60, D5<=79), "Passed", "FAIL"))**

Student Name	Marks	Pass/Fail	Grade
John	85	Pass	Distinction
Emily	92	Pass	Distinction
Michael	78	Pass	Passed
Sarah	88	Pass	Distinction
David	95	Pass	Distinction
Jessica	70	Pass	Passed
Daniel	83	Fail	Distinction
Olivia	32	Pass	FAIL

- **NOT:** Select any cell with logical value and use **=NOT(cell\_name)**.
- **IF ERROR:** **=IFERROR(D9/D17, "Error")**
- **AVERAGEIF:** **=AVERAGEIF(F6:F12, "Passed", D6:D13)**
- **COUNTIF:** **=COUNTIF(D5:D12, ">=80")**

Student Name	Marks	Pass/Fail	Grade
John	85	Pass	Distinction
Emily	92	Pass	Distinction
Michael	78	Pass	Passed
Sarah	88	Pass	Distinction
David	95	Pass	Distinction
Jessica	70	Pass	Passed
Daniel	83	Fail	Distinction
Olivia	32	Pass	FAIL
<b>SUMIF</b>	<b>184</b>		
<b>AVERAGEIF</b>	<b>68.5</b>		
<b>COUNTIF</b>	<b>4</b>		