**Experiment No. 1.1**

**Student Name:** Gaurav Kumar  **UID:** 22MCC20177

**Branch:** MCA **–** CCD **Section/Group:** MCD-1/ Grp A

**Semester:** III **Date of Performance:** 10th Aug 23 **Subject Name:** Business Analytics **Subject Code:** 22CAH-703

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

1. Formatting the worksheet using logical formula IF Statement, Nested IF, AND, OR, NOT, IFERROR, SUMIF,

AVERAGEIF, COUNTIF and AVERAGEIF)

1. Create and apply formulas as per user requirements.

**2. Code for practical:**

* Performing following formula for following table.

|  |  |
| --- | --- |
| **Student Name** | **Marks** |
| 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 |
|  |  |  |  |
| **SUMIF** | **184** |  |  |
| **AVERAGEIF** | **68.5** |  |  |
| **COUNTIF** | **4** |  |  |