

## **TASK 1 – Dataset Selection & Import**

Explored rows, columns, data types, and missing values.

**Task:** Write 3–4 key observations about the dataset.

1. Global Freelancer raw data set
2. Messy data
3. Missing values

## **TASK 2 – Data Entry & Formatting**

Practice editing, inserting, deleting rows/columns. Format headers (bold, colors, alignment).

**Task:** Made dataset look clean and readable.

## **TASK 3 – Basic Excel Formulas (Part1)**

SUM()=Sum(no.of product cell range)

AVERAGE=Average(no.of product cell

range) MIN()=Min(no.of product cell range)

MAX()=Max(no.of product cell range)

COUNT()=Count(no.of product cell range)

**Task:** Created a summary table showing total, average, and count of main numeric columns.

SUM	8715
AVERAGE	8.715
MIN	1
MAX	20
COUNT	1000

## **TASK 4 – Basic Excel Formulas (Part 2)**

SUMIF()=Sumif(Status cell range,"Active",No.of Project cell range)

=> 2382 COUNTIF()=Countif(Status cell range,"Active") =>260

AVERAGEIF()=Averageif(Status cell range,"Active",No.of project cell range) => 9.16 **Task:** Write at least 3 conditions (for example, count sales above 10,000).

IF()=IF(Project Status>15,"High"IF(Project Status>=10,"Medium","Low"))

## **TASK 5 – Text Functions**

**Practice** LEFT()=Left(A2,2)

RIGHT()=Right(A2,3)

MID()=Mid(A2,3,3)

UPPER()=Upper(E2)

LOWER()=Lower(E2)

PROPER()=Proper(E2)

**Task:** Cleaned and format text columns (names, cities, etc.) properly.

## **TASK 6 – Data Validation & Cleaning Intro**

Added drop-down lists => Home->Data->Filter

Detected duplicates and removed them=> Data->Data Tools->RemoveDuplicates

Handled blank cells using filters or formulas=> =IF(ISBLANK(Cell range),Average(cell range))

**Task:** Ensured dataset has no duplicates and missing values handled.

## **TASK 7 – Power Query Introduction (Optional if Excel 365)**

Load data into Power Query=> Data->Get Data->From Table/Range->Close & Load Removed nulls, duplicates, replaced inconsistent data.

**Task:** Cleaned data and re-load into Excel.

## **TASK 8 – Handling Inconsistent Data**

Text-to-Columns=>Data->Data Tools->Text to Columns->Delimited Flash Fill=> Data->Data Tools->Flash Fill

TRIM()=>=Trim([@Name])

## **TASK 9 – Conditional Formatting for Data Cleaning**

Highlighted duplicate Values=>Home->Conditional Formatting->Height Cells Rules->Duplicate Values(red)

**Task:** Created color-based rules to visually flag data issues.

## **TASK 10 – Descriptive Statistics**

Used Analysis ToolPak → Descriptive Statistics.

**Task:** Generated Mean, Median, and Standard Deviation for numeric columns.

## **TASK 11 – Filtering, Sorting & Exploring**

**Data Filters=>** Choose Filter Option->Select any one item. **Sort=>** Arranging your data in a specific order.

Find top 5 and bottom 5 entries by value.

**Task:** A mini report of key patterns (Top 5 performers, etc.).

Name	Primary Skill	Ratings
Jason Carter	Data Analysis	5
Bethany Wright	Cybersecurity	5
Daniel Harrington	AI	5
William Knapp	UI/UX Design	5
Allen Lee	DevOps	5

## **TASK 12 – Date & Time**

### **Functions**

`TODAY()=11.11.2025`

`NOW()=11.11.2025 23.26`

`YEAR()=YEAR(AA13)=2025`

`MONTH()=MONTH(AA13)=11`

`WEEKDAY()=WEEKDAY(AA14,1)=3`

`DATEDIF()=DATEDIF(AB18,AC18,"Y")=2`

**Task:** Calculated duration , time differences from dataset.

## **TASK 13 – Lookup & Reference**

### **Functions (Part 1) VLOOKUP()**

=VLOOKUP(\$A2,\$A:\$C,2,FALSE)

VLOOKUP()=VLOOKUP(\$A2, \$A:\$C, 3,  
FALSE)

**Task:** Duplicated the dataset using Vlookup function.

## **TASK 14 – (Part 2)**

MATCH()=MATCH(B4,B2:B1001,0)

INDEX() =IF(B4="\"",INDEX(\$E\$2:\$E\$1001,MATCH(E4,\$B\$2:\$B\$1001,0)),B4)

**Task:** Used INDEX and MATCH to fill missing values in one column by fetching the correct data from another related table.

## **TASK 15 – Pivot Tables (Part 1)**

Created simple PivotTables.

**Task:** Showed total Project by country.

## **TASK 16 – Pivot Tables (Part 2)**

Connected multiple tables =>Data->Data Tools->Data Model->Relationships

**Task:** Created one PivotChart linked to your PivotTable.

## **TASK 17 – Charts & Graphs**

Practiced Charts

**Task:** Visualized key KPIs (such as No.of project).

## **TASK 18 – Charts & Graphs (Part 2)**

Created Combo charts, Sparklines, and use filters/slicers.

**Task:** Added interactivity to your visuals.

## **TASK 19 – Advanced Visualization & Storytelling**

Added titles, legends, color themes, and storytelling flow.

**Task:** Arranged visuals neatly and make it presentation-ready

## **TASK 20 – Dashboard Design & AI Integration**

Used Quick Analysis for charts and summaries.

Tryed Excel AI Analyst for formula suggestions and insights.

**Task:** Made a one-page dashboard summarizing insights.

**Key insights:**

A complete end-to-end Excel data analysis workflow, from raw data to dashboards.

I've practiced all essential skills required for a Data Analyst role:

- ✓ Data cleaning
- ✓ Data transformation
- ✓ Analysis
- ✓ Lookup functions
- ✓ PivotTables
- ✓ Visualization
- ✓ Dashboard creation