**COPYING DATA OR WHOLE TABLE FROM ANOTHER SHEET IN EXCEL AND GOOGLE SHEET**

There are several ways to do it—

1. **Excel-**

* **Simple Copy and Paste:** Select table or data and hit **Ctrl+C, then Ctrl+V** to the desired sheet.
* **Direct Cell Reference:** This method make mirror of the original, means if any change occurs in the main sheet, it’ll automatically updated to the another.

Syntax: **=SheetName!A1)**

* **VLOOKUP or HLOOKUP:** This method is a bit lengthy because the main functionality of VLOOKUP and HLOOKUP is to search a specific value in the table. But we can also achieve this task.  
  Syntax: =**VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])**

1. **Google Sheet-**

* **Simple Copy and Paste**

**VLOOKUP/HLOOKUP in depth –**

**VLOOKUP** is used to search the value in vertical direction in a table using below formula.

=VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])

But the main problem with this is we cannot iterate the previous value of the selected lookup\_value

For example:-

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **OrderDate** | **Region** | **Rep** | **Item** | **Units** | **UnitCost** | **Total** |
| 6 January 2024 | East | Jones | Pencil | 95 | 1.99 | 189.05 |
| 23 January 2024 | Central | Kivell | Binder | 50 | 19.99 | 999.5 |
| 9 February 2024 | Central | Jardine | Pencil | 36 | 4.99 | 179.64 |
| 26 February 2024 | Central | Gill | Pen | 27 | 19.99 | 539.73 |
| 15 March 2024 | West | Sorvino | Pencil | 56 | 2.99 | 167.44 |
| 1 April 2024 | East | Jones | Binder | 60 | 4.99 | 299.4 |

**=VLOOKUP(“**6 January 2024**”,$A$2:$G$8,4,0)**

**O/P- Pencil**

**Limitation:-**

**=VLOOKUP(“East”,$A$2:$G$8,4,0)**Here this formula will not work because **lookup\_value** is in **second column** and **table\_array** is started from **first column.**

**HLOOKUP** is used to search the value in horizontal direction in a table using below formula.

=HLOOKUP(lookup\_value, table\_array, row\_index\_num, [range\_lookup])

But the main problem with this is we cannot iterate the previous value of the selected lookup\_value

**=VLOOKUP(“**6 January 2024**”,$A$2:$G$8,5,0)**

**O/P- West**

**Limitation:-**

**=VLOOKUP(“East”,$A$2:$G$8,4,0)**

\***The same thing is as VLOOKUP ‘previous values cannot be iterated’.**

**To overcome this problem there is XLOOKUP**

**XLOOKUP**

Using this we can iterate previous values also of columns/rows.

**=XLOOKUP(lookup\_value, lookup\_array, return\_array, [if\_not\_found], [match\_mode], [search\_mode])**

Example**-**

=XLOOKUP(A1, $A$1:$G$7, $A$1:$G$7, “NOT FOUND”, 0)

* This will iterate the value of **A1** present in **$A$1:$G$7** .
* Now we can drag this to any direction left/right/top/bottom.

### 1. Relative References

* **Definition**: A relative reference changes when the formula is copied or moved to another cell. It is based on the relative position of the cell being referenced.
* **Example**: If you have a formula in cell B2 that references cell A2 (e.g., =A2), and you copy the formula to cell B3, the reference will automatically adjust to A3.
* **Use Case**: Relative references are useful when you want to apply the same calculation or operation across multiple rows or columns.

**2. Absolute References**

* **Definition**: An absolute reference does not change when the formula is copied or moved. It always refers to the same cell, regardless of where the formula is copied.
* **Syntax**: In Excel and Google Sheets, you make a reference absolute by adding dollar signs ($) to the column letter and row number (e.g., $A$2).
* **Example**: If you have a formula in cell B2 that references cell $A$2 (e.g., =$A$2), and you copy the formula to cell B3, the reference will still point to $A$2.
* **Use Case**: Absolute references are useful when you want to refer to a fixed value or cell (e.g., a constant, tax rate, or specific data point).

**3. Mixed References**

* **Definition**: A mixed reference is a combination of relative and absolute references. You can fix either the row or the column while allowing the other to change.
* **Syntax**:
  + Fix the column: $A2 (column A is absolute, row 2 is relative).
  + Fix the row: A$2 (column A is relative, row 2 is absolute).
* **Example**: If you have a formula in cell B2 that references $A2, and you copy the formula to cell C3, the reference will adjust to $A3 (column A remains fixed, but the row changes).

**Example in Practice**

* **Relative**: =A2+B2 (copied from C2 to C3 becomes =A3+B3).
* **Absolute**: =$A$2+$B$2 (copied from C2 to C3 remains =$A$2+$B$2).
* **Mixed**: =$A2+B$2 (copied from C2 to C3 becomes =$A3+B$2).

Understanding these references is crucial for creating efficient and accurate spreadsheets!