# POWER-BI SCENARIO BASED QUESTIONS

**QUESTION 23 & 24**

- Joins in Power-BI
- Deloitte Question

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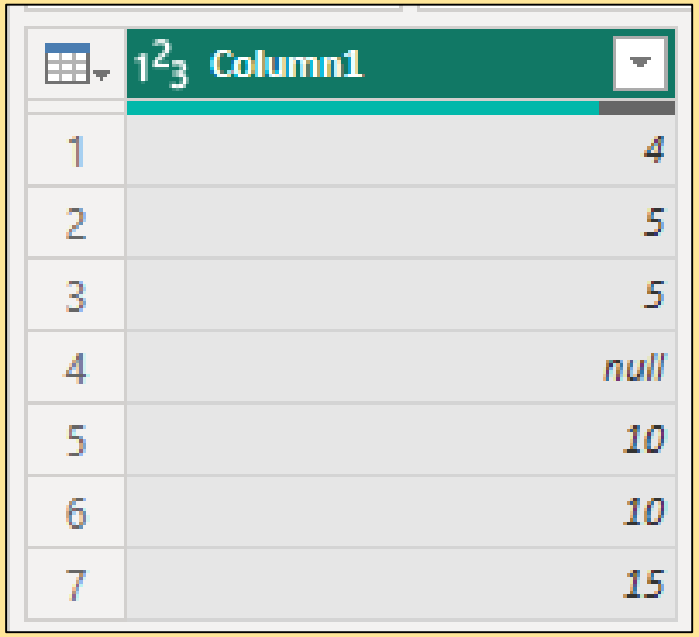
**QUESTION 23** Different types of joins in Power-bi

## SAMPLE TABLES

| | Column1 | Column2 |
|---|---|---|
| 1 | 10 | 10 |
| 2 | 1 | 4 |
| 3 | null | null |
| 4 | 2 | 5 |
| 5 | 3 | 6 |

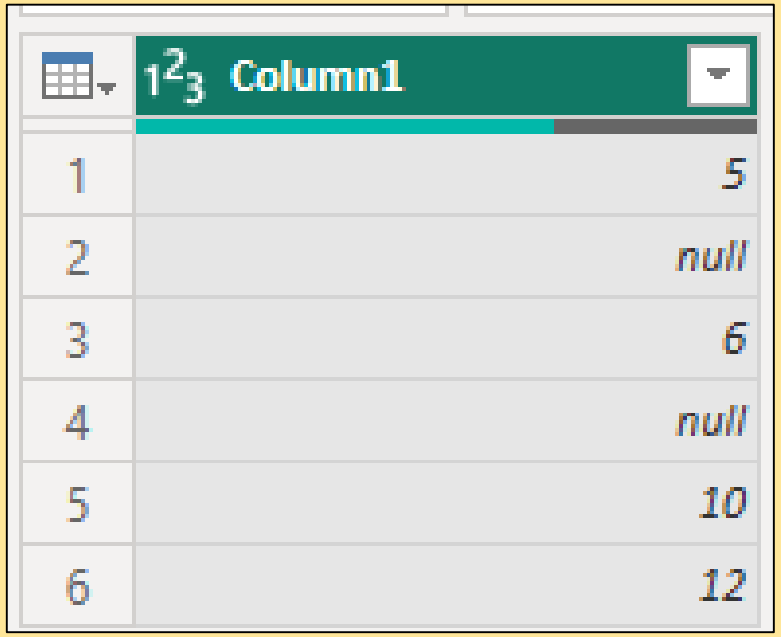
Null verify table

Left table



| | Column1 |
|---|---|
| 1 | 4 |
| 2 | 5 |
| 3 | 5 |
| 4 | null |
| 5 | 10 |
| 6 | 10 |
| 7 | 15 |

right table



| | Column1 |
|---|---|
| 1 | 5 |
| 2 | null |
| 3 | 6 |
| 4 | null |
| 5 | 10 |
| 6 | 12 |

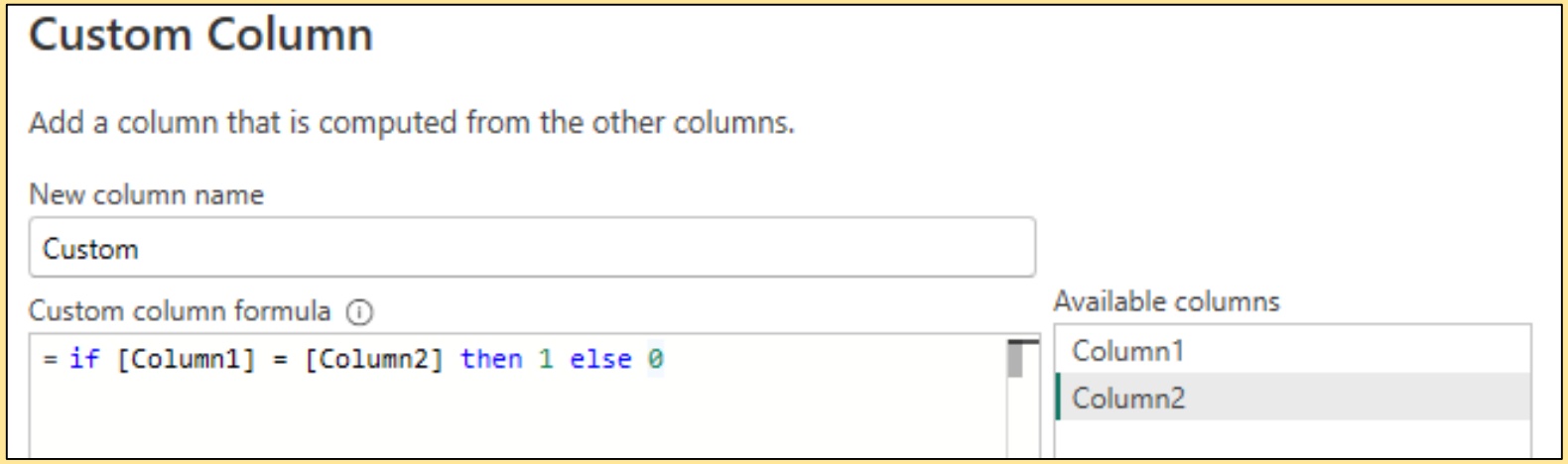
**QUESTION 23(1)**

What is null in Power-BI?

Null or Blank in SQL is **not same** as in Power-bi.

If any dataset in power query editor has blank value, power query displays it as null rather than blank.

Generally null != null whereas
in Power-BI null = null




| | Column1 | Column2 | Custom |
|---|---|---|---|
| 1 | 10 | 10 | 1 |
| 2 | 1 | 4 | 0 |
| 3 | null | null | 1 |
| 4 | 2 | 5 | 0 |
| 5 | 3 | 6 | 0 |

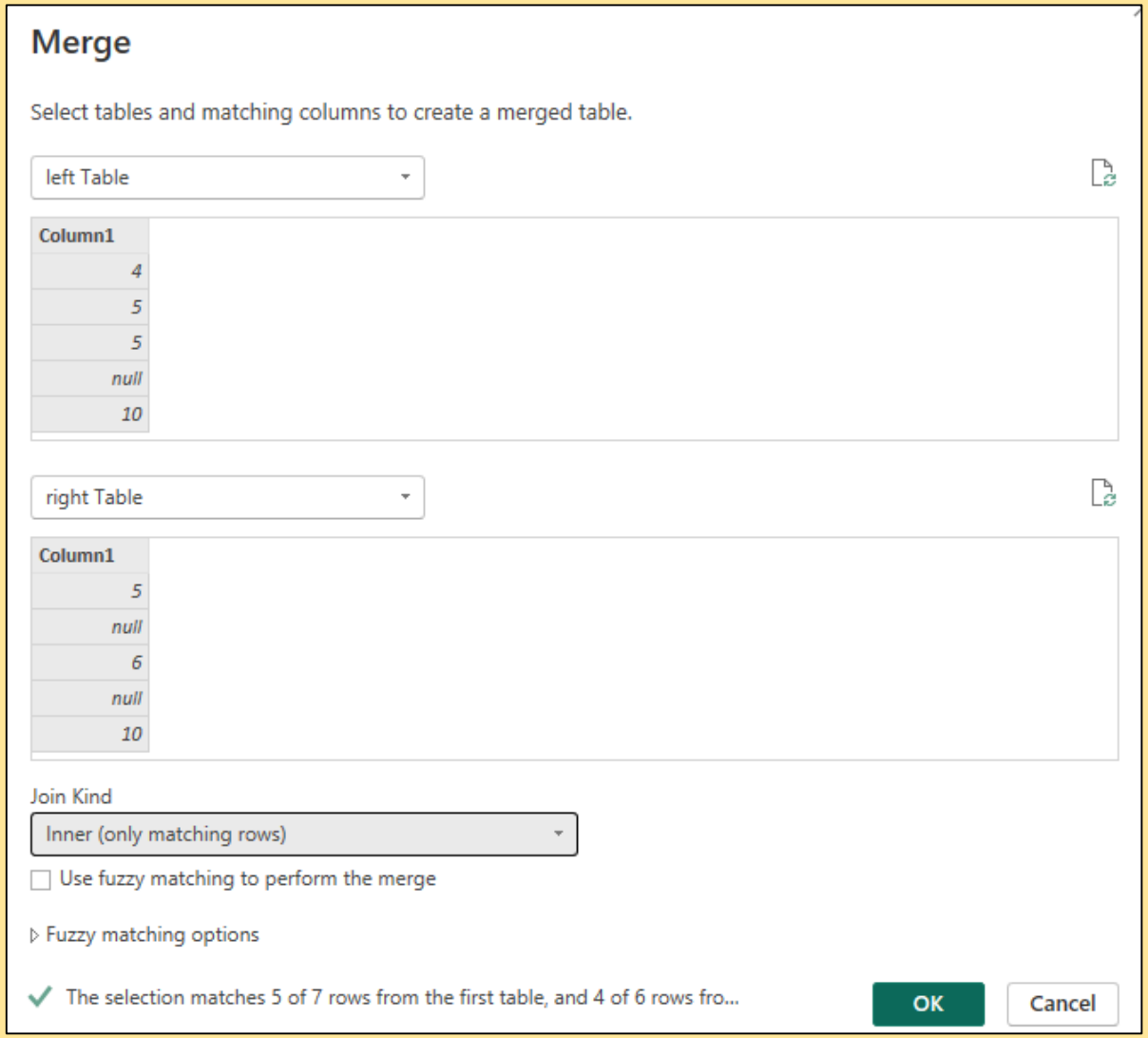
Hence proved, null = null

**QUESTION 23(2)**

Show different joins in Power-BI

- Inner join
- Left outer join
- Right outer join
- Left=anti join
- Right-anti join
- Full outer join

# Inner join




| | Column1 | Column1.1 |
|---|---|---|
| 1 | 5 | 5 |
| 2 | 5 | 5 |
| 3 | null | null |
| 4 | null | null |
| 5 | 10 | 10 |
| 6 | 10 | 10 |

# Left outer join

## Merge

Select tables and matching columns to create a merged table.

left Table

| Column1 |
|---|
| 4 |
| 5 |
| 5 |
| null |
| 10 |

right Table

| Column1 |
|---|
| 5 |
| null |
| 6 |
| null |
| 10 |

Join Kind

Left Outer (all from first, matching from second)

☐ Use fuzzy matching to perform the merge

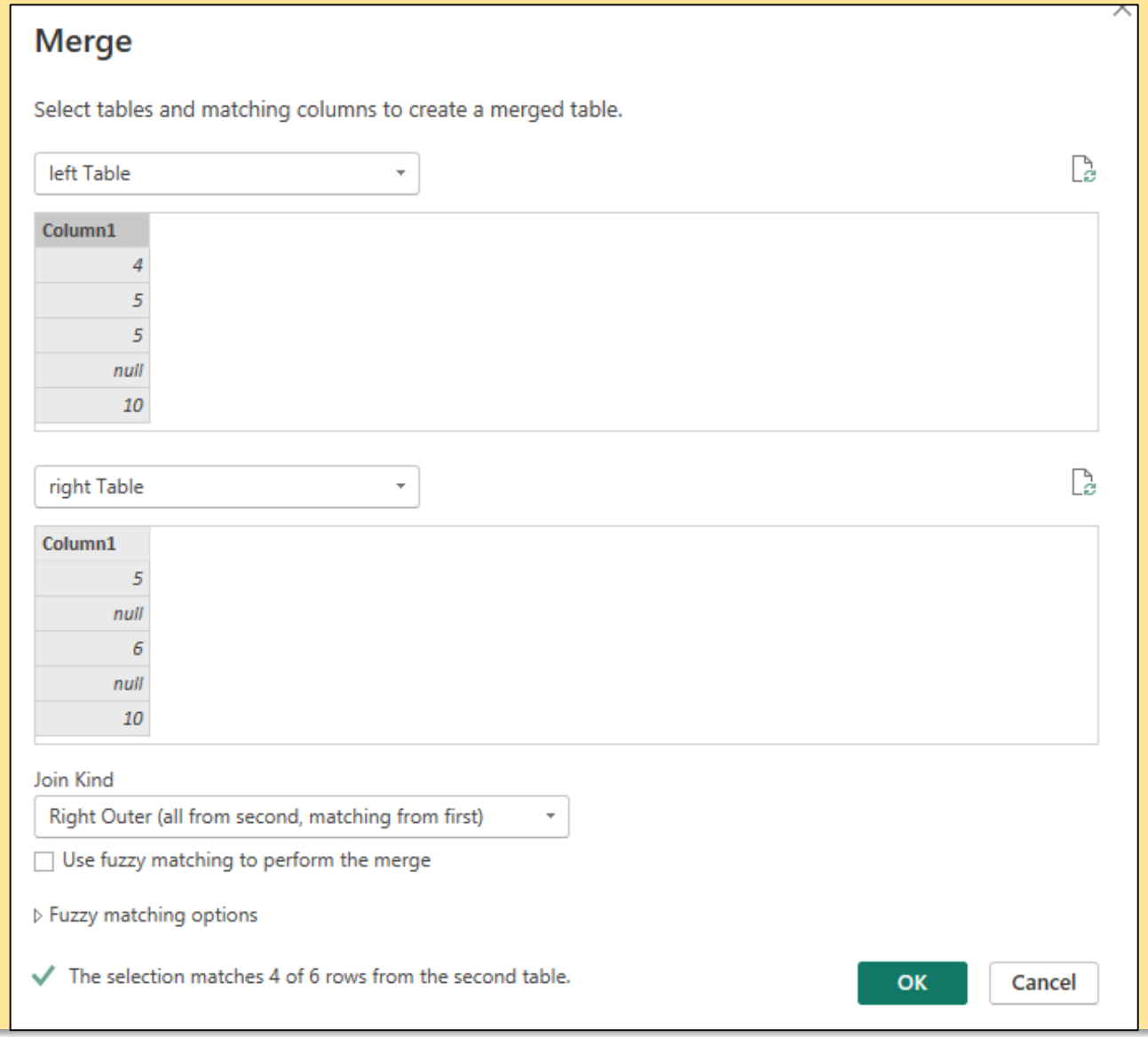
▷ Fuzzy matching options

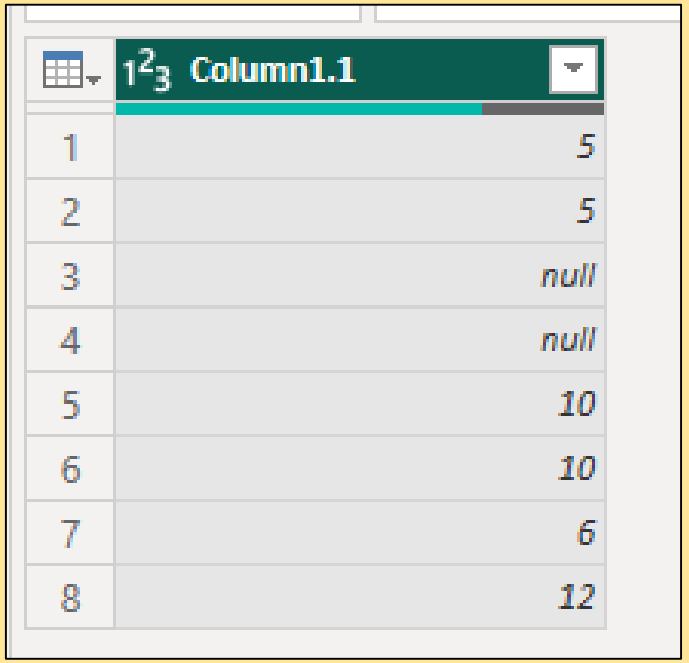
✓ The selection matches 5 of 7 rows from the first table.

OK Cancel

| | Column1 |
|---|---|
| 1 | 4 |
| 2 | 5 |
| 3 | 5 |
| 4 | null |
| 5 | null |
| 6 | 10 |
| 7 | 10 |
| 8 | 15 |

# Right outer join



| | Column1.1 |
|---|---|
| 1 | 5 |
| 2 | 5 |
| 3 | null |
| 4 | null |
| 5 | 10 |
| 6 | 10 |
| 7 | 6 |
| 8 | 12 |

## Merge

Select tables and matching columns to create a merged table.

left Table

| Column1 |
|---|
| 4 |
| 5 |
| 5 |
| null |
| 10 |

right Table

| Column1 |
|---|
| 5 |
| null |
| 6 |
| null |
| 10 |

Join Kind

Left Anti (rows only in first)

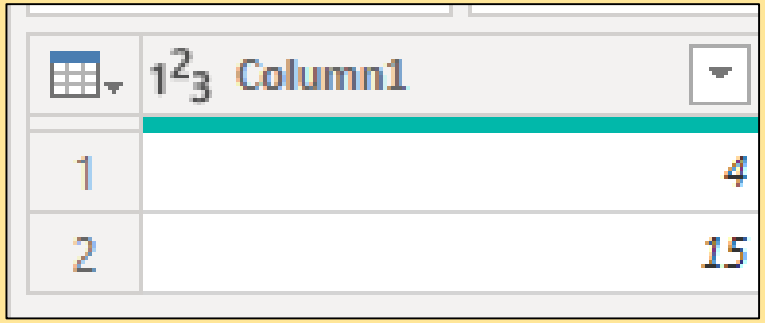
Use fuzzy matching to perform the merge

Fuzzy matching options

The selection excludes 5 of 7 rows from the first table.

OK Cancel

# Left-anti join



| | Column1 |
|---|---|
| 1 | 4 |
| 2 | 15 |

# Right-anti join

## Merge

Select tables and matching columns to create a merged table.

left Table

| Column1 |
|---|
| 4 |
| 5 |
| 5 |
| null |
| 10 |

right Table

| Column1 |
|---|
| 5 |
| null |
| 6 |
| null |
| 10 |

Join Kind

Right Anti (rows only in second)

☐ Use fuzzy matching to perform the merge

▷ Fuzzy matching options

✓ The selection excludes 4 of 6 rows from the second table.

OK Cancel

| | Column1.1 |
|---|---|
| 1 | 6 |
| 2 | 12 |

# Full outer join

## Merge

Select tables and matching columns to create a merged table.

left Table

| Column1 |
|---|
| 4 |
| 5 |
| 5 |
| null |
| 10 |

right Table

| Column1 |
|---|
| 5 |
| null |
| 6 |
| null |
| 10 |

Join Kind

Full Outer (all rows from both)

Use fuzzy matching to perform the merge

Fuzzy matching options

The selection matches 5 of 7 rows from the first table, and 4 of 6 rows fro...

OK Cancel

| | Column1 | Column1.1 |
|---|---|---|
| 1 | 4 | null |
| 2 | 5 | 5 |
| 3 | 5 | 5 |
| 4 | null | null |
| 5 | null | null |
| 6 | 10 | 10 |
| 7 | 10 | 10 |
| 8 | 15 | null |
| 9 | null | 6 |
| 10 | null | 12 |

**QUESTION 24** From the given table create a new table with only 3 columns having conditions –
1). productid <= 100 2). product name starts with s 3). product price >= 500

## SAMPLE TABLE

| ProductID | Product name | Price | color | quantity |
|---|---|---|---|---|
| 10 | SP1 | 600 | Red | 1 |
| 50 | P2 | 200 | green | 2 |
| 70 | SP3 | 900 | black | 3 |
| 80 | P4 | 400 | white | 4 |
| 200 | P5 | 500 | blue | 5 |
| 300 | SP6 | 150 | yellow | 6 |
| 700 | P7 | 700 | orange | 7 |
| 100 | SP8 | 800 | purple | 8 |

Products table

```
1 New table = CALCULATETABLE(
2     SUMMARIZECOLUMNS(products[ProductID], products[Product name], products[Price]),
3 products[ProductID]<= 100, products[Price] >= 500,
4 SEARCH("s",products[Product name],1,BLANK())
5 )
```

| ProductID | Product name | Price |
|---|---|---|
| 10 | SP1 | 600 |
| 70 | SP3 | 900 |
| 100 | SP8 | 800 |

# THANK YOU

- MAYURI .D.