| TABLE | | | |
|---|---|---|---|
| A | B | C | D |
| A1 | B1 | X1 | 10 |
| A1 | B1 | X2 | 10 |
| A1 | B2 | X3 | 30 |
| A1 | B2 | X4 | 20 |
| A2 | B1 | X5 | 40 |
| A2 | B1 | X6 | 60 |
| A2 | B2 | X7 | 50 |
| A2 | B2 | X8 | 80 |

| COMMAND | DESCRIPTION | QUERY | RESULT OF THE QUERY |
|---|---|---|---|

**COUNT()**

Let's try counting the number of records at the level of A

*Hover Mouse to See Query [1]*

| A | B | C | D | CNT |
|---|---|---|---|---|
| A1 | B1 | X1 | 10 | 4 |
| A1 | B1 | X2 | 10 | 4 |
| A1 | B2 | X3 | 30 | 4 |
| A1 | B2 | X4 | 20 | 4 |
| A2 | B1 | X5 | 40 | 4 |
| A2 | B1 | X6 | 60 | 4 |
| A2 | B2 | X7 | 50 | 4 |
| A2 | B2 | X8 | 80 | 4 |

**SUM()**

Let's try to sum D at the level of A and B

*Hover Mouse to See Query [2]*

| A | B | C | D | SUM |
|---|---|---|---|---|
| A1 | B1 | X1 | 10 | 20 |
| A1 | B1 | X2 | 10 | 20 |
| A1 | B2 | X3 | 30 | 50 |
| A1 | B2 | X4 | 20 | 50 |
| A2 | B1 | X5 | 40 | 100 |
| A2 | B1 | X6 | 60 | 100 |
| A2 | B2 | X7 | 50 | 130 |
| A2 | B2 | X8 | 80 | 130 |

**ROW_NUMBER()**

Adds a row number at the level and order specified. Let's add row numbers at the level of A and order by D in the descending order.

*Hover Mouse to See Query [3]*

| A | B | C | D | ROWNUM |
|---|---|---|---|---|
| A1 | B2 | X3 | 30 | 1 |
| A1 | B2 | X4 | 20 | 2 |
| A1 | B1 | X1 | 10 | 3 |
| A1 | B1 | X2 | 10 | 4 |
| A2 | B2 | X8 | 80 | 1 |
| A2 | B1 | X6 | 60 | 2 |
| A2 | B1 | X5 | 50 | 3 |
| A2 | B2 | X7 | 40 | 4 |

**RANK()**

Adds a rank at the level and order specified. Let's add row numbers at the level of A and order by D in the ascending order.

*Hover Mouse to See Query [4]*

| A | B | C | D | RNK |
|---|---|---|---|---|
| A1 | B1 | X1 | 10 | 1 |
| A1 | B1 | X2 | 10 | 1 |
| A1 | B2 | X4 | 20 | 3 |
| A1 | B2 | X3 | 30 | 4 |
| A2 | B1 | X5 | 40 | 1 |
| A2 | B2 | X7 | 50 | 2 |
| A2 | B1 | X6 | 60 | 3 |
| A2 | B2 | X8 | 80 | 4 |

**DENSE_RANK()**

Adds a dense rank at the level and order specified. Let's add row numbers at the level of A and order by D in the ascending order.

*Hover Mouse to See Query [5]*

| A | B | C | D | D_RNK |
|---|---|---|---|---|
| A1 | B1 | X1 | 10 | 1 |
| A1 | B1 | X2 | 10 | 1 |
| A1 | B2 | X4 | 20 | 2 |
| A1 | B2 | X3 | 30 | 3 |
| A2 | B1 | X5 | 40 | 1 |
| A2 | B2 | X7 | 50 | 2 |
| A2 | B1 | X6 | 60 | 3 |
| A2 | B2 | X8 | 80 | 4 |

[1] SELECT
    A,
    B,
    C,
    D,
    COUNT(*) OVER (PARTITION BY A) AS CNT
FROM TABLE;

[2] SELECT
    A,
    B,
    C,
    D,
    SUM(D) OVER (PARTITION BY A, B) AS SUM
FROM TABLE;

[3] SELECT
    A,
    B,
    C,
    D,
    ROW_NUMBER() OVER (PARTITION BY A ORDER BY D DESC) AS ROWNUM
FROM TABLE;

[4] SELECT
    A,
    B,
    C,
    D,
    RANK() OVER (PARTITION BY A ORDER BY D ASC) AS RNK
FROM TABLE;

[5] SELECT
    A,
    B,

```
    C,
    D,
    DENSE_RANK() OVER (PARTITION BY A ORDER BY D ASC) AS D_RNK
FROM TABLE;
```