

1. AVG: Calculates the average value, excluding nulls.
2. COUNT: Returns the number of rows with non-null values for the expression.
3. Standard Deviation (STDDEV): For two sets of data with approximately the same mean, the greater the spread, the greater the standard deviation.
4. Group Functions: Operate on sets of rows to give one result per group.
5. MIN: Returns the minimum value, ignoring nulls.
6. Variance (VARIANCE): Used with columns that store numeric data to calculate the spread of data around the mean.
7. SUM: Calculates the sum, ignoring null values.
8. MAX: Returns the maximum value, ignoring nulls.
9. Aggregate: To gather into a sum or whole.

1.
  - a. SELECT AVG(salary) FROM employees;
  - b. SELECT COUNT(\*) FROM employees WHERE department\_id = 10;
  - c. SELECT MAX(salary) FROM employees;
  - d. SELECT MIN(salary) FROM employees;
  - e. SELECT STDDEV(salary) FROM employees;
  - f. SELECT SUM(salary) FROM employees;
  - g. SELECT VARIANCE(salary) FROM employees;
2. SELECT ROUND(AVG(cost), 2) AS average\_cost  
FROM d\_events;
3. SELECT AVG(salary) AS avg\_salary  
FROM employees  
WHERE manager\_id = 19;
4. SELECT SUM(salary) AS total\_salary  
FROM employees  
WHERE employee\_id IN (12, 9);
5. SELECT MIN(salary) AS lowest\_salary,  
MAX(hire\_date) AS most\_recent\_hire,  
MIN(last\_name) AS first\_employee,  
MAX(last\_name) AS last\_employee  
FROM employees  
WHERE department\_id IN (50, 60);
6. SELECT SUM(total\_sales) FROM orders;
7. Cause of higher-than-expected salary averages: The report might include hourly employees along with salaried employees
8. The earliest (oldest) birthdate will be returned, which is March 30, 1969
9. SELECT AVG(order\_total) AS average\_order\_total  
FROM orders  
WHERE order\_date BETWEEN '01-JAN-2002' AND '21-DEC-2002';
10. SELECT MAX(hire\_date) AS last\_hire\_date  
FROM employees;
11. SUM(operating\_cost)

12.

- a. b. SELECT SUM(cost) (valid)
- b. d. SELECT AVG(cost) AS "Expense" (valid)
- c. g. SELECT MIN(event\_date) (valid)