**FUNCTIONS USED IN HACKATHON ( 1-80 QUESTIONS + EXTRA QUESTIONS)**

DATE AND TIME FUNCTIONS

1. CURRENT\_DATE()

2. DATE\_PART()

3. DATE\_TRUNC()

4. NOW()

5. EXTRACT()

STRING AND TEXT FUNCTIONS

6. STRPOS()

7. LPAD()

8. RPAD()

9. INITCAP()

10. POSITION()

11. LEFT()

12. RIGHT()

13. TRANSLATE()

14. REPLACE()

15. TRIM()

16. RTRIM()

17. LTRIM()

18. LENGTH()

19. SPLIT\_PART()

20. REVERSE()

21. STRING\_TO\_ARRAY()

22. TO\_CHAR()

23. REGEXP\_MATCHES()

24. REGEXP\_REPLACE()

25. REGEXP\_SUBSTR()

26. CONCAT()

MATH AND NUMERIC FUNCTIONS

27. SUM()

28. CORR()

29. AVG()

30. CEIL()

31. COUNT()

32. VARIANCE()

33. FLOOR()

34. ROUND()

ARRAY FUNCTIONS

35. ARRAY\_AGG()

36. UNNEST()

37. ARRAY\_TO\_STRING()

38. ARRAY\_UPPER()

39. ARRAY\_DIMS()

40. ARRAY\_TO\_JSON()

41. ARRAY()

WINDOW AND RANKING FUNCTIONS

42. LAG()

43. LEAD()

44. DENSE\_RANK()

45. PERCENT\_RANK()

46. CUME\_DIST()

47. NTILE()

48. ROW\_NUMBER()

AGGREGATE AND STATISTICAL FUNCTIONS

49. MAX()

50. MIN()

51. PERCENTILE\_DISC()

52. RANK()

53. VAR\_POP()

54. VAR\_SAMP()

55. COVAR\_POP()

56. COVAR\_SAMP()

57. STDDEV\_SAMP()

58. MODE()

59. STRING\_AGG()

60. JSON\_AGG()

OTHER FUNCTIONS

61. SETSEED()

62. WIDTH\_BUCKET()

63. RANDOM()

64. GENERATE\_SERIES()

65. SUBSTRING()

66. CAST()

67. INHERITS()

68. ARRAY\_LENGTH()

69. CHAR\_LENGTH()

70. LOWER()

71. NULLIF()

72. COALESCE()

73. JSON\_AGG()

74. UPPER()

75. RANDOM()

76. SETSEED()

77. WIDTH\_BUCKET()

78. ARRAY\_DIMS()

79. ARRAY\_TO\_JSON()

80. GREATEST()

81. LEAST()

82. COVAR\_SAMP()

83. STDDEV\_SAMP()

| **FUNCTIONS USED IN EXTRA QUESTIONS** |
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1. **STRPOS()**: Returns the position of a substring within a string.

2. **LPAD():** Left-pads a string with a specified character.

3. **RPAD():** Right-pads a string with a specified character.

4. **CONCAT():** Combines two or more strings into a single string.

5. **POSITION():** Returns the position of a substring in a string.

6. **RIGHT():** Extracts a specified number of characters from the end of a string.

7. **TRANSLATE():** Replaces characters in a string based on a mapping.

8. **CORR():** Computes the correlation coefficient between two sets of data.

9. **UPPER():** Converts a string to uppercase.

10. **LAG():** Accesses the value of a previous row in a result set.

11. **CEIL():** Rounds a numeric value up to the nearest integer.

12**. ARRAY\_AGG():** Aggregates values into an array.

13. **UNNEST():** Expands an array into separate rows.

14. **ARRAY\_TO\_STRING():** Converts an array to a string with a specified delimiter.

15. **STRING\_TO\_ARRAY():** Converts a string to an array based on a delimiter.

16. **SETSEED():** Sets the seed value for random number generation.

17. **PERCENTILE\_DISC():** Calculates the discrete percentile for a dataset.

18. **VAR\_POP():** Calculates the population variance.

19. **VAR\_SAMP():** Calculates the sample variance.

20. **COVAR\_POP():** Calculates the population covariance.

21. **SUBSTRING():** Extracts a substring from a string.

22. **REPLACE():** Replaces occurrences of a substring in a string.

23. **ARRAY\_LENGTH():** Returns the length (number of elements) of an array.

24**. NOW():** Retrieves the current date and time.

25. **MODE():** Calculates the mode (most frequent value) in a dataset.

26. **TO\_CHAR():** Converts a value to a string with a specified format.

27. **REGEXP\_MATCHES():** Searches for regular expressions in a string and returns matched substrings.

28. **REGEXP\_REPLACE():** Replaces substrings in a string based on a regular expression pattern.

29. **REGEXP\_SUBSTR():** Extracts substrings from a string based on a regular expression pattern.

30. **TRIM():** Removes specified characters from the beginning and end of a string.

31. **RTRIM():** Removes specified characters from the end of a string.

32. **LTRIM():** Removes specified characters from the beginning of a string.

33. **LENGTH():** Calculates the length (number of characters) of a string.

34. **SPLIT\_PART():** Splits a string into multiple parts based on a delimiter and returns a specific part.

35. **REVERSE():** Reverses the characters in a string.

36. **CUME\_DIST():** Computes the cumulative distribution of a value within a dataset.

37. **NTILE():** Divides a dataset into equal-sized buckets and assigns a bucket number to each row.

38. **ROW\_NUMBER():** Assigns a unique number to each row within a result set.

39. **LEAD():** Accesses the value of a subsequent row in a result set.

40. **REGR\_SLOPE():** Calculates the slope of a linear regression line.

41. **REGR\_INTERCEPT():** Calculates the intercept of a linear regression line.

42. **REGR\_R2():** Calculates the coefficient of determination (R-squared) in a linear regression.

43. **ARRAY\_UPPER():** Returns the upper bound of an array dimension.

44. **LOWER():** Converts a string to lowercase.

45. **NULLIF():** Returns null if two values are equal; otherwise, returns the first value.

46. **COALESCE():** Returns the first non-null value from a list of expressions.

47. **STRING\_AGG():** Aggregates values into a single string with a specified delimiter.

48. **REGEXP\_SPLIT\_TO\_ARRAY**(): Splits a string into an array based on a regular expression pattern.

49. **REGEXP\_SPLIT\_TO\_TABLE():** Splits a string into a table based on a regular expression pattern.

50. **ARRAY\_DIMS():** Returns the dimensions of an array.

51. **ARRAY\_TO\_JSON():** Converts an array to a JSON array.

52. **GREATEST():** Returns the greatest value from a list of expressions.

53. **LEAST():** Returns the least value from a list of expressions.

54. **COVAR\_SAMP():** Calculates the sample covariance.

55. **STDDEV\_SAMP():** Calculates the sample standard deviation.

56. **PERCENTILE\_CONT()**: It takes a percentile value and a sort specification, and returns an interpolated value that would fall into that percentile value with respect to the sort specification.

57.**RANGE\_INTERSECT\_AGG():** It is an aggregate function that returns the intersection of all non-NULL input range values ​​in a group