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1. Exit the interactive Grunt shell using the command **QUIT**

2. The **EXPLAIN** operator is used to display the logical, physical, and MapReduce execution plans of a relation.

3. The **GROUP** operator is used to group the data in one or more relations. It collects the data having the same key.

4. **SELF JOIN** is used to join a table with itself as if the table were two relations, temporarily renaming at least one relation.

5. The **UNION** operator of Pig Latin is used to merge the content of two relations.

6. The **SPLIT** operator is used to split a relation into two or more relations.

7. The **DISTINCT** operator is used to remove redundant (duplicate) tuples from a relation.

8. The **FOREACH** operator is used to generate specified data transformations based on the column data.

9. The **ORDER BY** operator is used to display the contents of a relation in a sorted order based on one or more fields.

10. To calculate the highest value for a column (numeric values or chararrays) in a single-column bag.

**Max()**

11. To get the number of elements in a bag, while counting the number of tuples in a bag.

**Count()**

12. To compute the average of the numerical values within a bag.

**Avg()**

13. To concatenate two or more expressions of same type.

**Concat()**

14. To compute the number of elements based on any Pig data type.

**Size()**

15. To subtract two bags. It takes two bags as inputs and returns a bag which contains the tuples of the first bag that are not in the second bag.

**Substract()**

16. To get the total of the numeric values of a column in a single-column bag.

**Sum()**

17. To split a string (which contains a group of words) in a single tuple and return a bag which contains the output of the split operation.

**Tokensize()**

18. To verify whether a given string ends with a particular substring.

**endsWith()**

19. Accepts two string parameters and verifies whether the first string starts with the second.

**startsWith()**

20. Returns a substring from a given string.

**Substring()**

21. Returns the first occurrence of a character in a string, searching forward from a start index.

**Indexof()**

22. To replace existing characters in a string with new characters.

**Replace()**

23. Returns the date-time object of the current time.

**CurrentTime()**

24. Returns the day of a month from the date-time object.

**GetDay(datetime)**

25. Returns the hour of a day from the date-time object.

**GetHour(datetime)**

26. Returns the month of a year from the date-time object.

**GetMonth(datetime)**

27. To get the absolute value of an expression.

**ABS()**

28. This function is used to get the cube root of an expression.

**CBRT(expression)**

29. This function is used to get the Euler’s number e raised to the power of x.

**Exp()**

30. To get the natural logarithm (base e) of an expression.

**LOG(exp)**