What are the MongoDB aggregate() pipeline functions that are equivalent to these parts of a SQL query?  
SELECT  
INNER JOIN  
WHERE  
GROUP BY  
HAVING  
ORDER BY  
LIMIT

**SQL Query**

The domain-specific programming language known as SQL is used for managing data stored in relational database management systems or for stream processing in relational data stream management systems.

Data is retrieved from the database using SQL queries, although the effectiveness of the queries varies. This is because many databases have proprietary extensions that are system-specific. SQL essentially gives databases CRUD functionality.

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**MongoDB**

MongoDB stores data as adaptable documents that resemble JSON, which allows fields to alter from document to document and allows data structures to change over time.

Data is simple to work with since the document model corresponds to the objects in your application code.

Powerful methods for accessing and analyzing your data include ad hoc queries, indexing, and real-time aggregation.

Since MongoDB is fundamentally a distributed database, features like built-in high availability, easy horizontal scaling, and geographic distribution are all included.

The use of MongoDB is cost-free.

Explanation

A unique flow of actions that processes, alters, and provides results is referred to as the aggregation pipeline. In a pipeline, subsequent operations are guided by the outcome of the prior operation.

One or more phases in an aggregate pipeline process documents:

The input papers are subjected to an operation at each level. A stage, for instance, can organise documents, filter documents, and compute values.

The output documents from one step are transferred to the following stage.

For collections of documents, an aggregation pipeline can produce results. Return the total, average, maximum, and minimum values, for instance.

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**MongoDB aggregate() pipeline functions that are equivalent to given parts of a SQL query**

SELECT $project

INNER JOIN $lookup & $match

WHERE $match

GROUP BY $group

HAVING $match

ORDER BY $sort

LIMIT $limit

Explanation

$project

forwards the documents containing the specified fields to the following pipeline stage. Existing fields from the input documents or recently computed fields may be specified for the fields.

$match

Filters the documents so that only those that satisfy the required condition(s) are forwarded to the following pipeline stage.

$lookup & $match

You can substitute the $lookup & $match operators from the aggregate technique for MongoDB Inner Joins in place of Join. The $lookup feature in MongoDB 3.2 is a really welcome addition. It can help with some of the issues that come with using sparse relational data in a NoSQL database.

$group

Using a "group key," the $group stage divides documents into groups. One document is produced for each distinct group key.

$sort

Sorts every input document, then sends the sorted documents back to the pipeline.

$limit

restricts the number of papers sent on to the pipeline's next level.

**Final Answer**

Structured data is saved in SQL databases, but unstructured data is saved in NoSQL databases like MongoDB. Unstructured data is stored in JSON format in MongoDB. Advanced analytics and joins are not supported by MongoDB the way they are by SQL databases.

The aggregation pipeline enables MongoDB to offer native aggregation features that are analogous to a number of frequently used SQL aggregation techniques.