

11. Explain the purpose and usage of the aggregate methods `count()`, `sum()`, `avg()`, `max()`, and `min()` in Laravel's query builder. Provide an example of each.

ans:

***count():** The `count()` method is used to retrieve the total count of records that match the specified conditions.

Example usage:

```
$count = DB::table('users')->count();
```

In this example, the `count()` method is called on the query builder to retrieve the total count of records in the "users" table.

***sum():** The `sum()` method is used to calculate the sum of a specific column's values from the matching records.

Example usage:

```
$totalAmount = DB::table('orders')->sum('amount');
```

In this example, the `sum('amount')` method is called on the query builder to calculate the sum of the "amount" column values from the "orders" table.

***avg():** The `avg()` method is used to calculate the average value of a specific column from the matching records.

Example usage:

```
$averagePrice = DB::table('products')->avg('price');
```

In this example, the `avg('price')` method is called on the query builder to calculate the average value of the "price" column from the "products" table.

***max():** The `max()` method is used to retrieve the maximum value of a specific column from the matching records.

Example usage:

```
$highestScore = DB::table('scores')->max('score');
```

In this example, the `max('score')` method is called on the query builder to retrieve the maximum value of the "score" column from the "scores" table.

***min():** The `min()` method is used to retrieve the minimum value of a specific column from the matching records.

Example usage:

```
$lowestPrice = DB::table('products')->min('price');
```

In this example, the `min('price')` method is called on the query builder to retrieve the minimum value of the "price" column from the "products" table.