

MongoDB – Calculate Totals

Create Demo Documents

ObjectId	<code>_id: ObjectId("5d54543efe978c19986182d7")</code>
Int32	<code>inventoryid: 1</code>
Int32	<code>category: 1</code>
String	<code>Title: "Data Science"</code>
Int32	<code>pages: 112</code>



```
_id: ObjectId("5d5457edfe978c19986182d8")
inventoryid: 2
category: 1
title: "Database Design"
pages: 225
```

```
_id: ObjectId("5d5458b3fe978c19986182d9")
inventoryid: 3
category: 1
title: "Analytics"
pages: 400
```

```
_id: ObjectId("5d54674efe978c19986182da")
inventoryid: 4
category: 2
title: "Java Programming"
pages: 127
```

```
_id: ObjectId("5d54682cfe978c19986182db")
inventoryid: 5
category: 2
title: "C++ Programming"
pages: 211
```

Calculate Page Total for Each Category

The screenshot shows the MongoDB Compass interface with the **Aggregations** tab selected. The pipeline consists of a single stage named **\$group**. The aggregation expression is as follows:

```
1 ▾ /**  
2  * _id - The id of the group.  
3  * field1 - The first field name.  
4  */  
5 ▾ {  
6    _id: "$category",  
7    totalpages: {$sum:"$pages"  
8  }  
9 }
```

Red arrows point to the **Aggregations** tab, the **\$group** stage selector, and the **\$category** and **\$pages** fields in the expression.

The output section, titled "Output after \$group stage (Sample of 2 documents)", displays two results in red-bordered boxes:

Document	_id	totalpages
1	_id: 1	737
2	_id: 2	338

Calculate Overall Page Total

The screenshot shows the MongoDB Compass interface with the **Aggregations** tab selected. The top navigation bar includes **Documents**, **Aggregations**, **Schema**, **Explain Plan**, **Indexes**, and **Validation**. The **Aggregations** tab is active, and the pipeline editor shows a single stage named **\$group**. The pipeline editor's left pane contains a JSON document with a **totalpages** field calculated using the **\$sum** operator. The right pane shows the output of the pipeline, which is a single document with **_id: ""** and **totalpages: 1075**. Red arrows highlight the **Aggregations** tab, the **\$group** stage, and the **\$sum** operator in the pipeline editor. A red box highlights the output document.

Documents Aggregations Schema Explain Plan Indexes Validation

COLLATION Enter a p SAVE PIPELINE ... COMMENT MODE SAMPLE MODE AUTO PREVIEW

0 Documents in the Collection Preview of Documents in the Collection

Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)

\$group Output after \$group stage (Sample of 1 document)

```
1 /**
2  * _id - The id of the group.
3  * field1 - The first field name.
4  */
5 {
6   _id: "",
7   totalpages: {$sum: "$pages"}
8 }
9 }
```

```
{
  "_id": "",
  "totalpages": 1075
}
```

Count Number of Books

The screenshot shows the MongoDB Compass interface with the 'Aggregations' tab selected. The top navigation bar includes 'Documents', 'Aggregations', 'Schema', 'Explain Plan', 'Indexes', and 'Validation'. Below the navigation bar, there are buttons for 'COLLATION', 'Enter a p', 'SAVE PIPELINE', and a menu icon. To the right are three toggle switches for 'COMMENT MODE', 'SAMPLE MODE', and 'AUTO PREVIEW', all of which are turned on. The main workspace is divided into two panes. The left pane contains a message: '0 Documents in the Collection' and a 'Select an operator to construct expressions used in the aggregation pipeline stages. [Learn more](#)' instruction. The right pane shows a 'Preview of Documents in the Collection'. Below the left pane, there is a section for the aggregation pipeline. It features a dropdown menu with '\$count' selected, a toggle switch, and an information icon. To the right of this section is a button with a plus sign. The output of the aggregation stage is displayed in the right pane, showing a sample of 1 document: 'inventoryid: 5'. The aggregation pipeline is visualized in a code editor on the left, showing the following stages:

```
1 ▾ /**
2   * Provide the field name for the count.
3   */
4   'inventoryid'
```