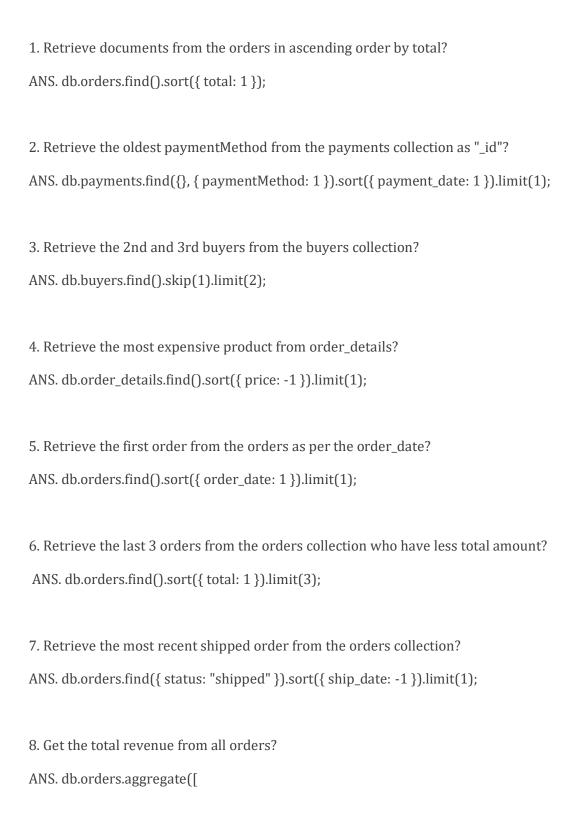
## MongoDB Queries

### MongoDB Queries



```
$group: {
   _id: null,
   totalRevenue: { $sum: "$total" }
  }
}
]);
9. Retrieve all the orders that shipped before 2022-05-26?
ANS. db.orders.find({ ship_date: { $lt: new Date("2022-05-26") } });
10. Find the maximum price as maxPrice of products and their names as name for each category?
ANS. db.products.aggregate([
{
  $group: {
   _id: "$category_id",
   maxPrice: { $max: "$price" },
   name: { $first: "$name" } // Adjust to get all product names if needed
  }
}
]);
11. Find the most used payment method as paymentMethod and the number of times it is used as count?
ANS. db.payments.aggregate([
{
  $group: {
   _id: "$paymentMethod",
   count: { $sum: 1 }
```

```
}
 },
 { $sort: { count: -1 } },
 { $limit: 1 }
]);
12. Find the total count of orders by status?
ANS. db.orders.aggregate([
 {
  $group: {
   _id: "$status",
   count: { $sum: 1 }
  }
 }
]);
13. Retrieve the orders grouped by customer_id with the max total?
ANS. db.orders.aggregate([
 {
  $group: {
   _id: "$customer_id",
   maxTotal: { $max: "$total" }
  }
 }
]);
```

### Additional Problems for Set 2

14. Assess the impact of RAM capacity on laptop prices and ratings? ANS. db.laptops.aggregate([ { \$group: { \_id: "\$ram", avgPrice: { \$avg: "\$price" }, avgRating: { \$avg: "\$rating" } } } ]); 15. Investigate the price and rating distribution for gaming laptops? ANS. db.laptops.aggregate([ { \$match: { category: "gaming" } }, { \$group: { \_id: "\$brand", avgPrice: { \$avg: "\$price" }, avgRating: { \$avg: "\$rating" }, avgGpuType: { \$first: "\$gpuType" }, // Assuming each brand uses one GPU type, adjust as needed avgRam: { \$avg: "\$ram" } } } ]);

16. Analyze the warranty periods offered by different brands and their correlation with laptop prices and ratings?

ANS. db.laptops.aggregate([

```
$group: {
   _id: "$brand",
   avgWarranty: { $avg: "$warranty" },
   avgPrice: { $avg: "$price" },
   avgRating: { $avg: "$rating" }
  }
}
]);
17. Examine the relationship between processor brand (Intel, AMD, Apple) and laptop price, rating, and
primary storage capacity?
ANS. db.laptops.aggregate([
{
  $group: {
   _id: "$processor_brand",
   avgPrice: { $avg: "$price" },
   avgRating: { $avg: "$rating" },
   avgStorage: { $avg: "$storage" }
  }
}
]);
```