

1. How many products did you scrape?

```
db.flipkart.count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.count()  
DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.  
7620
```

2. How many products have a discount on them?

```
db.flipkart.find({ $expr : { $ne : ["$original_price", "$sale_price"] }  
}).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find({ $expr : { $ne : ["$original_price", "$sale_price"] } }).count()  
0
```

3. How many Topwear products don't have any discount on them?

```
db.flipkart.find({  
  product_category : "topwear",  
  $expr : { $eq : ["$original_price", "$sale_price"] }  
}).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find({ product_category : "topwear", $expr : { $eq : ["$original_price", "$sale_price"] } }).count()  
4680
```

4. How many unique brands are present in the collection?

```
db.flipkart.distinct("brand").length
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.distinct("brand").length  
314
```

5. What is the count of discounted products for each brand?

```
db.flipkart.aggregate([  
  {  
    $match: { $expr: { $ne: ["$original_price", "$sale_price"] } }  
  },  
  {  
    $group: { _id: "$brand", discountedProductCount: { $sum: 1 } }  
  }  
])
```

Ans: since there are no document with discount, group by does not have any input thus none.

Had, there been any discounted products, the query would have shown the result.

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.aggregate([ { $match: { $expr: { $ne: [ "$original_price", "$sale_price" ] } } }, { $group: { _id: "$brand", discountedProductCount: { $sum: 1 } } } ] )
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { "name": /shirt/ } )
```

6. How many products have `shirt` in their name?

Contains : " shirt"

```
db.flipkart.find( { "name": / shirt/ } ).count()
```

Contains: "shirt"

```
db.flipkart.find( { "name": /shirt/ } ).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { "name": / shirt/ } ).count()
632
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { "name": /shirt/ } ).count()
1469
```

7. How many products have offer price greater than 300?

```
db.flipkart.find( { "sale_price": { $gt: 300 } } ).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { "sale_price": { $gt: 300 } } ).count()
5971
```

8. How many products have discount % greater than 30%?

```
let cmp = { $divide: [ "$sale_price", "$original_price" ] }
```

```
db.flipkart.find( { $expr: { $lt : [ cmp, NumberDecimal("0.7") ] } } ).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> let cmp = { $divide: [ "$sale_price", "$original_price" ] }
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { $expr: { $lt : [ cmp, NumberDecimal("0.7") ] } } ).count()
0
```

9. How many footwear products have a 50% discount?

```
db.flipkart.find( {
  product_category : { $eq: "footwear" },
  $expr: { $eq : [ cmp, NumberDecimal("0.5") ] }
} ).count()
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.find( { product_category : { $eq: "footwear" }, $
expr: { $eq : [ cmp, NumberDecimal("0.5") ] } } ).count()
0
```

10. Which brand in Topwear section is selling the most number of products?

```
db.flipkart.aggregate(  
  {$match:{"product_category":"topwear"}},  
  {$group : {_id : "$brand", "sumP" : {$sum : 1}}} ,  
  {$sort:{"sumP": -1}},  
  {$limit:1})
```

```
Atlas atlas-gfi6wi-shard-0 [primary] arpan> db.flipkart.aggregate( {$match:{"product_category":"topwear"}, {$group : {_id : "$brand", "sumP" : {$sum : 1}}} , {$sort:{"sumP": -1}},{$limit:1})  
[ { _id: 'SAINT LAURENT', sumP: 107 } ]
```