

26-04-2022

Shwetha

Aggregate functions:

1) \$match:

```
db.mycollection.aggregate([{$match:{marks:100}},{$count:"Total number of students who scored 100"}])
```

```
{ "Total number of students who scored 100" : 2 }
```

```
> db.mycollection.aggregate([{$match:{marks:100}},{$count:"Total number of students who scored 100"}])
{ "Total number of students who scored 100" : 2 }
```

2. \$sort:

```
db.mycollection.aggregate([{$sort:{'fee_paid':1}}])
{ "_id" : ObjectId("624bc02ecc8fc22df10a893f"), "name" : "anvi", "marks" : 100, "fee_paid" : 10000 }
{ "_id" : ObjectId("624bc24014c22ccabf3e23d1"), "name" : "vidya", "marks" : 100, "sec" : "c", "fee_paid" : 15000 }
{ "_id" : ObjectId("624bc02ecc8fc22df10a8940"), "name" : "arpi", "marks" : 95, "fee_paid" : 20000, "sec" : "a" }
```

```
> db.mycollection.aggregate([{$sort:{'fee_paid':1}}]).pretty()
{
  "_id" : ObjectId("624bc02ecc8fc22df10a893f"),
  "name" : "anvi",
  "marks" : 100,
  "fee_paid" : 10000
}
{
  "_id" : ObjectId("624bc24014c22ccabf3e23d1"),
  "name" : "vidya",
  "marks" : 100,
  "sec" : "c",
  "fee_paid" : 15000
}
{
  "_id" : ObjectId("624bc02ecc8fc22df10a8940"),
  "name" : "arpi",
  "marks" : 95,
  "fee_paid" : 20000,
  "sec" : "a"
}
```

3.\$group:

>

```
db.mycollection.aggregate([{$group:{_id:"$sec",total_stduent:{$sum:1},max_fee_paid:{$max:"fee_paid"}}}]).pretty()
```

```
{ "_id" : "a", "total_stduent" : 2, "max_fee_paid" : 20000 }
{ "_id" : "c", "total_stduent" : 1, "max_fee_paid" : 15000 }
```

```
> db.mycollection.aggregate([{$group:{_id:"$sec",total_stduent:{$sum:1},max_fee_paid:{$max:"$fee_paid"}}}]).pretty()
{ "_id" : "a", "total_stduent" : 2, "max_fee_paid" : 20000 }
{ "_id" : "c", "total_stduent" : 1, "max_fee_paid" : 15000 }
```

4. \$limit:

```
> db.mycollection.aggregate([{$match:{sec:"a"}},{$sort':{'fee_paid': -1}},{$limit:1}]).pretty()
{
  "_id" : ObjectId("624bc02ecc8fc22df10a8940"),
  "name" : "arpi",
  "marks" : 95,
  "fee_paid" : 20000,
  "sec" : "a"
}
```

```
> db.mycollection.aggregate([{$match:{sec:"a"}},{'$sort':{'fee_paid': -1}},{$limit:1}]).pretty()
{
  "_id" : ObjectId("624bc02ecc8fc22df10a8940"),
  "name" : "arpi",
  "marks" : 95,
  "fee_paid" : 20000,
  "sec" : "a"
}
```