

Q3

```
> db.teachers.find().limit(2).pretty()
{
  "_id" : ObjectId("637125755011610fc41edb4"),
  "Tname" : "Archana",
  "dno" : 2,
  "dname" : "MECH",
  "exp" : 6,
  "salary" : 26000,
  "doj" : 0.0004997501249375312
}
{
  "_id" : ObjectId("6371268d55011610fc41edb7"),
  "Tname" : "Reshma",
  "dno" : 3,
  "dname" : "ELEC",
  "exp" : 6,
  "salary" : 22000,
  "doj" : 0.0004997501249375312
}
```

Q4

```
> db.teachers.find({dname:'Comp'}).pretty()
{
  "_id" : ObjectId("6371274055011610fc41edb8"),
  "Tname" : "Sahil",
  "dno" : 4,
  "dname" : "Comp",
  "exp" : 6,
  "salary" : 22000,
  "doj" : 0.0004997501249375312
}
{
  "_id" : ObjectId("63712d1ee28862c7efd0f13e"),
  "tname" : "Sahil",
  "Tname" : "Sahil",
  "dname" : "Comp",
  "dno" : 4,
  "doj" : 0.0004997501249375312,
  "exp" : 10,
  "salary" : 22000
}
```

Q5

```
> db.teachers.find({salary:{$gte:21000},$or:[{dname:'Comp'},{dname:'E&TC'}]}).pretty()
{
  "_id" : ObjectId("6371274055011610fc41edb8"),
  "Tname" : "Sahil",
  "dno" : 4,
  "dname" : "Comp",
  "exp" : 6,
  "salary" : 22000,
  "doj" : 0.0004997501249375312
}
{
  "_id" : ObjectId("63712d1ee28862c7efd0f13e"),
  "tname" : "Sahil",
  "Tname" : "Sahil",
  "dname" : "Comp",
  "dno" : 4,
  "doj" : 0.0004997501249375312,
  "exp" : 10,
  "salary" : 22000
}
```

Q21

Q2

```
> db.teachers.aggregate([{$group:{_id:'Comp',salary_avg:{$avg:'$salary'}}}]]
{ "_id" : "Comp", "salary_avg" : 23000 }
```

Q21

Q3

```
> db.teachers.aggregate([{$group:{_id:'E&TC',salary_min:{$min:'$salary'},salary_max:{$max:'$salary'}}}]]
{ "_id" : "E&TC", "salary_min" : 22000, "salary_max" : 26000 }
```

Q21

Q3

```
> db.teachers.aggregate([{$group:{_id:"",total_salary : {$sum:'$salary'}}}])
{ "_id" : "", "total_salary" : 92000 }
```

Q22

Q1

```
> db.teachers.aggregate([{$group:{_id:"$dname",avg_salary : {$avg:'$salary'}}}])
{ "_id" : "MECH", "avg_salary" : 26000 }
{ "_id" : "ELEC", "avg_salary" : 22000 }
{ "_id" : "Comp", "avg_salary" : 22000 }
{ "_id" : "computer", "avg_salary" : null }
{ "_id" : "Arts", "avg_salary" : null }
```

Q22

Q22

```
> db.teachers.aggregate([{$unwind:'$dname'},{$sortByCount:'$dname'}])
{ "_id" : "Comp", "count" : 2 }
{ "_id" : "MECH", "count" : 1 }
{ "_id" : "ELEC", "count" : 1 }
{ "_id" : "computer", "count" : 1 }
{ "_id" : "Arts", "count" : 1 }
```