1 DISPLAY THE INFORMATION FROM CUSTOMERS TABLE.

```
> db.customers.find()
{ "_id" : ObjectId("61cacb44a3b4e131994cb372"), "cust_id" : "1", "cust_name" : "kajal",
"cust_city": "ahmedabad", "cust_zip": "123456", "cust_email": "k@gmail.com" }
{ "_id" : ObjectId("61cacbeea3b4e131994cb373"), "cust_id" : "2", "cust_name" : "neha",
"cust_city": "surat", "cust_zip": "18956", "cust_email": "n@gmail.com" }
{ "_id" : ObjectId("61cacc21a3b4e131994cb374"), "cust_id" : "3", "cust_name" : "mina",
"cust_city": "jaipur", "cust_zip": "903456", "cust_email": "mina@gmail.com" }
{ "_id" : ObjectId("61cacc4da3b4e131994cb375"), "cust_id" : "4", "cust_name" : "pooja",
"cust city": "rajkot", "cust zip": "108956", "cust email": "pooja@gmail.com" }
{ "_id" : ObjectId("61cad9f3a3b4e131994cb376"), "cust_id" : "5", "cust_name" : "juhi", "cust_city"
: "baroda", "cust zip" : "199956", "cust email" : "juhi@gmail.com" }
{ "_id" : ObjectId("61cada17a3b4e131994cb377"), "cust_id" : "6", "cust_name" : "yash",
"cust_city": "gandhinagar", "cust_zip": "229956", "cust_email": "yash@gmail.com" }
{ "_id" : ObjectId("61cada54a3b4e131994cb378"), "cust_id" : "5", "cust_name" : "riya",
"cust_city": "ahmedabad", "cust_zip": "889956", "cust_email": "riya@gmail.com" }
{ " id" : ObjectId("61cada8ca3b4e131994cb379"), "cust id" : "8", "cust name" : "pina",
"cust_city": "rajkot", "cust_zip": "220056", "cust_email": "pina@gmail.com" }
{ "_id" : ObjectId("61cadab7a3b4e131994cb37a"), "cust_id" : "9", "cust_name" : "anjani",
"cust_city": "ahmedabad", "cust_zip": "220006", "cust_email": "anjani@gmail.com" }
{ " id" : ObjectId("61cadb8da3b4e131994cb37b"), "cust id" : "10", "cust name" : "krisha",
"cust city": "ahmedabad", "cust zip": "11006", "cust email": "krishagmail.com" }
```

2 DISPLAY THE DETAILS OF ALL EMPLOYEES.

```
>>db.employee.find()
{ "_id" : ObjectId("61cade4ea3b4e131994cb37d"), "emp_id" : "1", "emp_name" : "kajal",
"emp_city": "ahmedabad", "emp_sal": "11000", "emp_email": "kajalgmail.com" }
{ "_id" : ObjectId("61cade6ca3b4e131994cb37e"), "emp_id" : "2", "emp_name" : "anjani",
"emp_city": "ahmedabad", "emp_sal": "15000", "emp_email": "anjani@gmail.com" }
{ "_id" : ObjectId("61cade9ba3b4e131994cb37f"), "emp_id" : "3", "emp_name" : "shriya",
"emp_city": "surat", "emp_sal": "15000", "emp_email": "shriya@gmail.com" }
{ "_id" : ObjectId("61cadeb2a3b4e131994cb380"), "emp_id" : "4", "emp_name" : "avani",
"emp_city": "baroda", "emp_sal": "15000", "emp_email": "avani@gmail.com" }
{ " id" : ObjectId("61cadecba3b4e131994cb381"), "emp id" : "5", "emp name" : "riya",
"emp_city": "surat", "emp_sal": "15000", "emp_email": "riya@gmail.com" }
{ "_id" : ObjectId("61cadee6a3b4e131994cb382"), "emp_id" : "6", "emp_name" : "shreyanshi",
"emp_city": "baroda", "emp_sal": "15000", "emp_email": "shreyanshi@gmail.com" }
{ "_id" : ObjectId("61cadf0ea3b4e131994cb383"), "emp_id" : "7", "emp_name" : "Isha",
"emp_city": "gandhinagar", "emp_sal": "15000", "emp_email": "isha@gmail.com" }
{ "_id" : ObjectId("61cadf4fa3b4e131994cb384"), "emp_id" : "8", "emp_name" : "priya",
"emp_city": "baroda", "emp_sal": "16000", "emp_email": "priya@gmail.com" }
{ "_id" : ObjectId("61cadf6ca3b4e131994cb385"), "emp_id" : "9", "emp_name" : "princy",
"emp_city": "surat", "emp_sal": "17000", "emp_email": "princy@gmail.com" }
{ "_id" : ObjectId("61cadf80a3b4e131994cb386"), "emp_id" : "10", "emp_name" : "krima",
"emp_city": "surat", "emp_sal": "17000", "emp_email": "krima@gmail.com" }
```

```
.db.employee.find({},{emp name:1,emp sal:1})
> db.employee.find({},{emp_name:1,emp_sal:1})
{ "_id" : ObjectId("61cade4ea3b4e131994cb37d"), "emp_name" : "kajal", "emp_sal" : "11000" }
{ "_id" : ObjectId("61cade6ca3b4e131994cb37e"), "emp_name" : "anjani", "emp_sal" : "15000" }
{ "_id" : ObjectId("61cade9ba3b4e131994cb37f"), "emp_name" : "shriya", "emp_sal" : "15000" }
{ "_id" : ObjectId("61cadeb2a3b4e131994cb380"), "emp_name" : "avani", "emp_sal" : "15000" }
{ "_id" : ObjectId("61cadecba3b4e131994cb381"), "emp_name" : "riya", "emp_sal" : "15000" }
{ " id" : ObjectId("61cadee6a3b4e131994cb382"), "emp_name" : "shreyanshi", "emp_sal" :
"15000" }
{ "_id" : ObjectId("61cadf0ea3b4e131994cb383"), "emp_name" : "Isha", "emp_sal" : "15000" }
{ "_id" : ObjectId("61cadf4fa3b4e131994cb384"), "emp_name" : "priya", "emp_sal" : "16000" }
{ "_id" : ObjectId("61cadf6ca3b4e131994cb385"), "emp_name" : "princy", "emp_sal" : "17000" }
{ "_id" : ObjectId("61cadf80a3b4e131994cb386"), "emp_name" : "krima", "emp_sal" : "17000" }
4.DISPLAY EMAIIAND CITYFOR ALL EMPLOYEE
db.employee.find({},{emp_email:1,emp_city:1})
{ " id" : ObjectId("61cade4ea3b4e131994cb37d"), "emp_city" : "ahmedabad", "emp_email" :
"kajalgmail.com" }
{ "_id" : ObjectId("61cade6ca3b4e131994cb37e"), "emp_city" : "ahmedabad", "emp_email" :
"anjani@gmail.com" }
{ " id" : ObjectId("61cade9ba3b4e131994cb37f"), "emp_city" : "surat", "emp_email" :
"shriya@gmail.com" }
{ "_id" : ObjectId("61cadeb2a3b4e131994cb380"), "emp_city" : "baroda", "emp_email" :
"avani@gmail.com" }
{ " id" : ObjectId("61cadecba3b4e131994cb381"), "emp_city" : "surat", "emp_email" :
"riya@gmail.com" }
{ "_id" : ObjectId("61cadee6a3b4e131994cb382"), "emp_city" : "baroda", "emp_email" :
"shreyanshi@gmail.com" }
{ "_id" : ObjectId("61cadf0ea3b4e131994cb383"), "emp_city" : "gandhinagar", "emp_email" :
"isha@gmail.com" }
{ "_id" : ObjectId("61cadf4fa3b4e131994cb384"), "emp_city" : "baroda", "emp_email" :
"priva@gmail.com" }
{ " id" : ObjectId("61cadf6ca3b4e131994cb385"), "emp_city" : "surat", "emp_email" :
"princy@gmail.com" }
{ "_id" : ObjectId("61cadf80a3b4e131994cb386"), "emp_city" : "surat", "emp_email" :
"krima@gmail.com" }
5.DISPLAY EMPLOYEE NUMBER AND TOTAL SALARY FOR EACH EMPLOYEE
db.employee.aggregate([{$group:{_id:"$emp_name",emp_sal:{$sum:"$emp_sal"}}}])
{ "_id" : "isha", "emp_sal" : 20000 }
{ "_id" : "princy", "emp_sal" : 0 }
{ " id": "priya", "emp sal": 0 }
{ "_id" : "Isha", "emp_sal" : 0 }
```

```
{ "_id" : "shreyanshi", "emp_sal" : 20000 }
{ "_id" : "riya", "emp_sal" : 30000 }
{ "_id" : "krima", "emp_sal" : 0 }
{ " id": "avani", "emp sal": 0 }
{ "_id" : "ania", "emp_sal" : 20000 }
{ "_id" : "shriya", "emp_sal" : 20000 }
{ "_id" : "anjani", "emp_sal" : 20000 }
{ "_id" : "kajal", "emp_sal" : 32000 }
6.DISPLAY EMPLOYEE NAME AND ANNUAL SALARY FOR ALL EMPLOYEES.
db.employee.aggregate([{$project:{emp_name:1,total:{$multiply:["$emp_sal",12] } } } ])
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "total" : 240000 }
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "total" : 240000 }
7.DISPLAY THE GENDER OF ALL STUDENTS WHO HAVE ID 4
db.student.find({std_id:"4",std_gender:"female"})
{ "_id" : ObjectId("61cae367a3b4e131994cb393"), "std_id" : "4", "std_name" : "shriya",
"std_gender": "female", "mob_no": "880558842", "r_no": "4" }
{ "_id" : ObjectId("61cae392a3b4e131994cb395"), "std_id" : "4", "std_name" : "arya",
"std_gender" : "female", "mob_no" : "880558842", "r_no" : "6" }
{ "_id" : ObjectId("61cae3dca3b4e131994cb397"), "std_id" : "4", "std_name" : "prya",
"std_gender": "female", "mob_no": "660558842", "r_no": "8" }
8.DISPLAY THE NAMES OF ALL EMPLOYEES SALARYMORE THAN 10000.
> db.employee.find({$and:[{emp_sal:{$gt:10000}},{emp_name:{$exists:true}}]})
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "avnigmail.com" }
{ " id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "isha@gmail.com" }
{ " id" : ObjectId("61cc3932909c31bd085099f4"), "emp id" : 5, "emp name" : "kajal", "emp city"
: "ahemdabad", "emp_sal" : 30000, "emp_email" : "k@gmail.com" }
9.DISPLAY EMPLOYEE NAME AND FOR EMPLOYEES WHO EARN SALARY GREATER
THEN 20000.
> db.employee.find({emp_sal:20000},{emp_name:1})
{ "_id" : ObjectId("61cc3932909c31bd085099f4"), "emp_name" : "kajal" }
```

```
10. DISPLAY NAMES OF EMPLOYEES WHO DO NOT EARN ANY SALARY
db.salary.find({amt:2000},{emp_name:1,_id:0})
11.DISPLAY THE TYEP OF PAYEMNT WHICH IS NETBANKING OR COD OR STATUS IS
PENDING
db.payment.find({$or:[{p_type:"netbanking"},{p_type:"cod"},{status:"pending"}]},{p_type:1})
{ "_id" : ObjectId("61cae83ea3b4e131994cb3ae"), "p_type" : "cod" }
{ "_id" : ObjectId("61cae863a3b4e131994cb3af"), "p_type" : "nebanking" }
{ " id" : ObjectId("61cae898a3b4e131994cb3b1"), "p type" : "cod" }
{ "_id" : ObjectId("61cae8b7a3b4e131994cb3b2"), "p_type" : "ewallets" }
{ " id" : ObjectId("61cae8d7a3b4e131994cb3b3"), "p type" : "cod" }
{ "_id" : ObjectId("61cae8fba3b4e131994cb3b4"), "p_type" : "cod" }
{ "_id" : ObjectId("61cae92da3b4e131994cb3b6"), "p_type" : "cod" }
{ "_id" : ObjectId("61cae939a3b4e131994cb3b7"), "p_type" : "cod" }
12. DISPLAY THE DATE OF PAYEMENT WHICH HAS DATE GREATER THEN 3
db.payment.find({date:{$gt:"3"}})
{ "_id" : ObjectId("61cae8d7a3b4e131994cb3b3"), "p_id" : "6", "p_type" : "cod", "amt" : "2000",
"status": "fullfileed", "date": "6/6/2022" }
{ "_id" : ObjectId("61cae8fba3b4e131994cb3b4"), "p_id" : "7", "p_type" : "cod", "amt" : "1000",
"status" : "pending", "date" : "8/7/2021" }
13. DISPLAY THE LIST OF EMPLOYEES WHO HAVE JOINED THE COMPANY BEFORE
30 TH JUNE 90OR AFTER 31 ST DEC 90
db.payment.find({date:{$gt:2020,$lt:2021}},{_id:0,p_type:1})
14. DISPLAY CURRENT DATE
Date()
Wed Dec 29 2021 18:52:01 GMT+0530 (IST)
15 DISPLAY THE LIST OF USERS IN YOUR DATABASE (USING LOG TABLE)
> db.getUsers()
[]
```

*16.DISPLAY THE NAMES OF ALL TABLES FROM THE CURRENT USER > show collections book college customers

```
faculty
hospital
payment
products
salary
student
17.DISPLAY THE NAME OF THE CURRENT USER.
> db.runCommand({connectionStatus : 1})
{
       "authInfo": {
             "authenticatedUsers":[],
             "authenticatedUserRoles" : [ ]
       "ok":1
}
18.DISPLAY THE NAMES OF EMPLOYEES WORKING IN DEPARTMENT NUMBER 1 OR
4 OR 46OR EMPLOYEES WORKING AS SALESMAN.
> db.faculty.find({$or:[{f id:1},{f id:4},{f id:6},{f dept:"sales"}]})
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "f_id" : "4", "f_name" : "rutu", "f_dept" :
"sales", "f_email": "rutu@gmail.com", "f_mob": "770452146" }
{ " id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "f id" : "7", "f name" : "shikha", "f dept" :
"sales", "f_email": "shikha@gmail.com", "f_mob": "728012386" }
{ " id" : ObjectId("61caf127a3b4e131994cb3d8"), "f id" : "10", "f name" : "drashti", "f dept" :
"sales", "f_email" : "drashti@gmail.com", "f_mob" : "7077476420" }
>
19. DISPLAY THE NAMES OF FACULTY WHOSE NAME STARTS WITH ALPHABET
db.faculty.find({"f_name":/.a./})
{ "_id" : ObjectId("61caefafa3b4e131994cb3cf"), "f_id" : "11", "f_name" : " Kajal", "f_dept" : "IT",
"f email": "k@gmail.com", "f mob": "98983456" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "f_id" : "6", "f_name" : "jalpa", "f_dept" :
"finance", "f email": "jalpa@gmail.com", "f mob": "78804754" }
{ " id" : ObjectId("61caf127a3b4e131994cb3d8"), "f id" : "10", "f name" : "drashti", "f dept" :
"sales", "f_email" : "drashti@gmail.com", "f_mob" : "7077476420" }
20.DISPLAY NAMES FOR FACULTY WHOSE NAME ENDS WITH
ALPHABET i
db.faculty.find({"f name":/...i/})
{ " id" : ObjectId("61caefcfa3b4e131994cb3d0"), "f_id" : "2", "f_name" : "priti", "f_dept" :
"purchase", "f_email" : "priti@gmail.com", "f_mob" : "90083456" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "f_id" : "9", "f_name" : "shruti", "f_dept" :
"marketing", "f_email" : "shruti@gmail.com", "f_mob" : "8055401260" }
{ " id" : ObjectId("61caf127a3b4e131994cb3d8"), "f id" : "10", "f name" : "drashti", "f dept" :
"sales", "f_email" : "drashti@gmail.com", "f_mob" : "7077476420" }
```

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21.DISPLAY THE NAMES OF faculty WHOSE NAMES HAVE SECOND ALPHABET A IN THEIR NAMES.

```
db.faculty.find({"f_name":/.a./})
{ "_id" : ObjectId("61caefafa3b4e131994cb3cf"), "f_id" : "11", "f_name" : " Kajal", "f_dept" : "IT",
    "f_email" : "k@gmail.com", "f_mob" : "98983456" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "f_id" : "6", "f_name" : "jalpa", "f_dept" :
    "finance", "f_email" : "jalpa@gmail.com", "f_mob" : "78804754" }
>
```

22. DISPLAY THE NAMES OF FACULTY WHOSE NAME IS EXACTLY FIVE CHARACTERS IN LENGTH

```
db.faculty.find({f_name:{$exists:true},$where:"this.f_name.length=5"}).limit(2);
{ "_id" : ObjectId("61caefafa3b4e131994cb3cf"), "f_id" : "11", "f_name" : " Kajal", "f_dept" : "IT",
   "f_email" : "k@gmail.com", "f_mob" : "98983456" }
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "f_id" : "2", "f_name" : "priti", "f_dept" :
   "purchase", "f_email" : "priti@gmail.com", "f_mob" : "90083456" }
>
```

23.DISPLAY THE NAMES OF EMPLOYEES WHO ARE NOT WORKING IN IT

```
> db.faculty.find({f dept:{$nin:["IT"]}})
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "f_id" : "2", "f_name" : "priti", "f_dept" :
"purchase", "f_email" : "priti@gmail.com", "f_mob" : "90083456" }
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "f_id" : "4", "f_name" : "rutu", "f_dept" :
"sales", "f_email": "rutu@gmail.com", "f_mob": "770452146" }
{ "_id" : ObjectId("61caf042a3b4e131994cb3d3"), "f_id" : "5", "f_name" : "nima", "f_dept" :
"law", "f_email": "nima@gmail.com", "f_mob": "90123416" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "f_id" : "6", "f_name" : "jalpa", "f_dept" :
"finance", "f_email": "jalpa@gmail.com", "f_mob": "78804754" }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "f_id" : "7", "f_name" : "shikha", "f_dept" :
"sales", "f_email": "shikha@gmail.com", "f_mob": "728012386" }
{ " id" : ObjectId("61caf0cca3b4e131994cb3d6"), "f id" : "8", "f name" : "krisha", "f dept" :
"finanace", "f email": "krisha@gmail.com", "f mob": "79550126" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "f_id" : "9", "f_name" : "shruti", "f_dept" :
"marketing", "f_email" : "shruti@gmail.com", "f_mob" : "8055401260" }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "f_id" : "10", "f_name" : "drashti", "f_dept" :
"sales", "f_email" : "drashti@gmail.com", "f_mob" : "7077476420" }
```

24. DISPLAY THE NAMES OF FAUCLTY WHO ARE NOT WORKING IN IT OR LAW OR PURCHASE

```
db.faculty.find({f_dept:{$nin:["IT","law","purchase"]}})
```

```
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "f_id" : "4", "f_name" : "rutu", "f_dept" :
"sales", "f_email" : "rutu@gmail.com", "f_mob" : "770452146" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "f_id" : "6", "f_name" : "jalpa", "f_dept" :
"finance", "f email": "jalpa@gmail.com", "f mob": "78804754" }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "f_id" : "7", "f_name" : "shikha", "f_dept" :
"sales", "f_email": "shikha@gmail.com", "f_mob": "728012386" }
{ "_id" : ObjectId("61caf0cca3b4e131994cb3d6"), "f_id" : "8", "f_name" : "krisha", "f_dept" :
"finanace", "f_email": "krisha@gmail.com", "f_mob": "79550126" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "f_id" : "9", "f_name" : "shruti", "f_dept" :
"marketing", "f_email" : "shruti@gmail.com", "f_mob" : "8055401260" }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "f_id" : "10", "f_name" : "drashti", "f_dept" :
"sales", "f email": "drashti@gmail.com", "f mob": "7077476420" }
>
*25.DISPLAY ALL ROWS FROM EMP TABLE. THE SYSTEM SHOULD WAIT AFTER
EVERY SCREEN FULL OF INFORMATION
db.book.find().pretty()
{
       "_id": ObjectId("61caeb24a3b4e131994cb3bb"),
       "b id": "1",
       "title": "coddarkness at noon",
       "author": "william",
       "price": "200",
       "page": "202"
}
{
       "_id": ObjectId("61caeb7fa3b4e131994cb3bc"),
       "b_id": "2",
       "title": "captch-22",
       "author": "joseph",
       "price": "200",
       "page": "402"
}
{
       "_id": ObjectId("61caebcda3b4e131994cb3bd"),
       "b_id": "3",
       "title": "grapes of wrath",
       "author": "john",
       "price": "300",
       "page" : "402"
}
{
       "_id": ObjectId("61caebf0a3b4e131994cb3be"),
       "b id": "4",
       "title": "under the valcano",
       "author": "malcon",
       "price": "500",
```

```
"page": "200"
}
{
       "_id": ObjectId("61caec26a3b4e131994cb3bf"),
       "b_id": "5",
       "title": " the way of all flesh",
       "author": "sameul",
       "price": "50",
       "page": "500"
}
{
       "_id": ObjectId("61caec4aa3b4e131994cb3c0"),
       "b_id": "6",
       "title": "invisible man",
       "author": "ralph",
       "price": "100",
       "page" : "400"
}
{
       "_id": ObjectId("61caec63a3b4e131994cb3c1"),
       "b_id": "6",
       "title": "native son",
       "author": "richard",
       "price": "200",
       "page": "400"
}
{
       "_id" : ObjectId("61caecb6a3b4e131994cb3c2"),
       "b_id": "8",
       "title": "hundreson the rain king",
       "author": "john",
       "price": "200",
       "page": "400"
}
{
       "_id": ObjectId("61caecd2a3b4e131994cb3c3"),
       "b_id": "9",
       "title": "A passage to india",
       "author": "E m forester",
       "price": "200",
       "page" : "100"
}
{
       "_id": ObjectId("61caecf0a3b4e131994cb3c4"),
       "b_id": "10",
       "title": "wings of dove",
       "author": "hennry",
       "price": "100",
       "page" : "200"
}
```

26. DISPLAY THE TOTAL NUMBER OF EMPLOYEES WORKING IN THE COMPANY db.employee.count() 27.DISPLAY THE TOTAL SALARY BEING PAID TO ALL EMPLOYEES > db.employee.aggregate([{\$group:{_id:0,emp_sal:{\$sum:"\$emp_sal"}}}]) { "_id" : 0, "emp_sal" : 70000 } 28.DISPLAY THE MAXIMUM SALARY FROM EMP TABLE > db.employee.aggregate([{\$group:{ id:null,emp sal:{\$max:"\$emp sal"}}}]) { "_id" : null, "emp_sal" : 30000 } 29.SPLAY THE MINIMUM SALARY FROM EMP TABLE > db.employee.aggregate([{\$group:{_id:null,emp_sal:{\$min:"\$emp_sal"}}}]) { "_id" : null, "emp_sal" : 20000 } 30.DISPLAY THE AVERAGE SALARY FROM EMP TABLE db.employee.aggregate([{\$group:{_id:"\$by_user",Average:{\$avg:"\$emp_sal"}}}]) { "_id" : null, "Average" : 23333.333333333333} } 31. DISPLAY THE MAXIMUM SALARY TO EMPLOYEE WHICH HAS CITY IS SURAT db.employee.aggregate([{\$match:{emp_city:"surat"}},{\$group:{_id:"\$emp_city",Maximum: {\$max:"\$emp sal"}}}]) { "_id" : "surat", "Maximum" : 20000 } 32.DISPLAY THE MAXIMUM SALARY BEING PAID IN empNO 3 > db.employee.aggregate([{\$match:{emp_id:"3"}},{\$group:{_id:"\$emp_id",minimum: {\$min:"\$emp_id"}}}]) 33. DISPLAY THE MIN SAL BEING PAID TO ANYEMPLOYEE db.employee.aggregate([{\$match:{emp_city:"surat"}},{\$group:{_id:"\$emp_city",Minimum: {\$min:"\$emp_sal"}}]) { "_id" : "surat", "Minimum" : 20000 } 34. DISPLAY THE AVERAGE SALARY DRAWN BY MANAGERS

db.employee.aggregate([{\$match:{emp_city:"surat"}},{\$group:{ id:"\$emp_city",Average:

{\$avg:"\$emp_sal"}}}])

```
{ "_id" : "surat", "Average" : 20000 }
35) DISPLAY THE TOTAL SALARY OF EMPLOYEE WHERE ARE FROM SPECIFIED CITY.
db.employee.aggregate([{$match:{emp_city:"ahemdabad"}},{$group:
{_id:"$emp_city",salary_sum:{$sum:"emp_sal"}}}])
{ "_id" : "ahemdabad", "salary_sum" : 0 }
36.DISPLAY THE NAMES OF EMPLOYEES IN ORDER OF SALARY I.E. THE NAME OF
THE EMPLOYEE EARNING LOWEST SALARY SHOULD APPEAR FIRST
> db.employee.find({},{emp_name:1,_id:0,emp_sal:1}).sort({"emp_sal":1})
{ "emp_name" : "ania", "emp_sal" : 20000 }
{ "emp_name" : "isha", "emp_sal" : 20000 }
{ "emp_name" : "kajal", "emp_sal" : 30000 }
37.DISPLAY THE NAMES OF EMPLOYEES IN DESCENDING ORDER OF SALARY
db.employee.find().sort({"emp sal":-1})
{ "_id" : ObjectId("61cc3932909c31bd085099f4"), "emp_id" : 5, "emp_name" : "kajal", "emp_city"
: "ahemdabad", "emp_sal" : 30000, "emp_email" : "k@gmail.com" }
{ " id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal" : 20000, "emp_email" : "isha@gmail.com" }
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "avnigmail.com" }
38.DISPLAY THE DETAILS FROM EMP TABLE IN ORDER OF EMP SAALRY
> db.employee.find().sort({"emp_name":1})
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp sal": 20000, "emp email": "avnigmail.com" }
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "isha@gmail.com" }
{ "_id" : ObjectId("61cc3932909c31bd085099f4"), "emp_id" : 5, "emp_name" : "kajal", "emp_city"
: "ahemdabad", "emp_sal" : 30000, "emp_email" : "k@gmail.com" }
39.DISPLAY EMPNO, ENAME, DEPTNO, AND SAL. SORT THE OUTPUT FIRST BASED
ON NAMEAND WITHIN NAME BY DEPTNO AND WITHIN DEPTNO BY SAL.
> db.employee.find({},{_id:0}).sort({"emp_name":1})
{ "emp_name" : "ania", "emp_city" : "surat", "emp_sal" : 20000, "emp_email" : "avnigmail.com" }
{ "emp_name" : "isha", "emp_city" : "surat", "emp_sal" : 20000, "emp_email" :
"isha@gmail.com" }
{ "emp_id" : 5, "emp_name" : "kajal", "emp_city" : "ahemdabad", "emp_sal" : 30000, "emp_email"
: "k@gmail.com" }
```

40.DISPLAY THE NAME OF THE EMPLOYEE ALONG WITH THEIR ANNUAL SALARY

```
(SAL * 12).
> db.employee.aggregate([{$project:{emp name:1,total:{$multiply:["$emp sal",12]}}}])
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "total" : 240000 }
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "total" : 240000 }
{ "id" : ObjectId("61cc3932909c31bd085099f4"), "emp name" : "kajal", "total" : 360000 }
41. DISPLAY THE NAME OF EMPLOYYE IN LOWERCASE
> db.employee.aggregate([{$project:{' id':0,emp name:{$toLower:"$emp name"}}}])
{ "emp name" : "ania" }
{ "emp name" : "isha" }
{ "emp name" : "kajal" }
42. DISPLAY THE NAME OF EMPLOYYE IN UPPERCASE
> db.employee.aggregate([{$project:{'_id':0,emp_name:{$toUpper:"$emp_name"}}}])
{ "emp name" : "ANIA" }
{ "emp name" : "ISHA" }
{ "emp name" : "KAJAL" }
43. DISPLAY THE NAME OF FACULTY CONCAT WITH DEPARTMENT
> db.faculty.aggregate([{$project:{'_id':0,f_name:{$concat:["$f_name","-","$f_dept"]}}}])
{ "f name" : " Kajal-IT" }
{ "f name" : "priti-purchase" }
{ "f name" : "riya-IT" }
{ "f name" : "rutu-sales" }
{ "f name" : "nima-law" }
{ "f name" : "jalpa-finance" }
{ "f name" : "shikha-sales" }
{ "f_name" : "krisha-finanace" }
{ "f_name" : "shruti-marketing" }
{ "f name" : "drashti-sales" }
44.FIND LENGTH OF NAME USING APPROPIATE FUNCTION
db.faculty.aggregate([{"$project":{"f_name":1,"length":{$strLenCP:"$f_name"}}}])
{ " id" : ObjectId("61caefafa3b4e131994cb3cf"), "f name" : " Kajal", "length" : 6 }
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "f_name" : "priti", "length" : 5 }
{ "_id" : ObjectId("61caf002a3b4e131994cb3d1"), "f_name" : "riya", "length" : 4 }
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "f_name" : "rutu", "length" : 4 }
{ " id" : ObjectId("61caf042a3b4e131994cb3d3"), "f name" : "nima", "length" : 4 }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "f_name" : "jalpa", "length" : 5 }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "f_name" : "shikha", "length" : 6 }
{ "_id" : ObjectId("61caf0cca3b4e131994cb3d6"), "f_name" : "krisha", "length" : 6 }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "f_name" : "shruti", "length" : 6 }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "f_name" : "drashti", "length" : 7 }
45.COBERT DATE TO STRING
> { $dateFromString: { dateString: "2021-12-30T12:10:40.787" } }
46, DISPLAY THE EMPLOYEE WHOSE SALARY IS SECOND HIGHEST
> db.employee.find({}).sort({"emp_sal":-1}).skip(1).limit(1)
```

```
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal" : 20000, "emp_email" : "isha@gmail.com" }
47.DISPAY THE FACULTY WITH THEIR EMAIL
> db.faculty.aggregate([{$project:{'_id':0,f_name:{$concat:["$f_name","-","$f_email"]}}}])
{ "f_name" : " Kajal-k@gmail.com" }
{ "f_name" : "priti-priti@gmail.com" }
{ "f_name" : "riya-riya@gmail.com" }
{ "f name" : "rutu-rutu@gmail.com" }
{ "f_name" : "nima-nima@gmail.com" }
{ "f_name" : "jalpa-jalpa@gmail.com" }
{ "f name" : "shikha-shikha@gmail.com" }
{ "f_name" : "krisha-krisha@gmail.com" }
{ "f name" : "shruti-shruti@gmail.com" }
{ "f_name" : "drashti-drashti@gmail.com" }
46. CONVERT STRING DATE INTO ISOFORMAT
{$year:{date: new Date("Jan 7,2003")}}
ISODate("2003-01-06T18:30:00Z")
48. GET FIRST 3 FROM EMPLOYEE
> db.faculty.aggregate([{$project:{EMPLOYEENAME:{$substr:["$f_name",0,3]}}}])
{ "_id" : ObjectId("61caefafa3b4e131994cb3cf"), "EMPLOYEENAME" : " Ka" }
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "EMPLOYEENAME" : "pri" }
{ "_id" : ObjectId("61caf002a3b4e131994cb3d1"), "EMPLOYEENAME" : "riy" }
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "EMPLOYEENAME" : "rut" }
{ "_id" : ObjectId("61caf042a3b4e131994cb3d3"), "EMPLOYEENAME" : "nim" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "EMPLOYEENAME" : "jal" }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "EMPLOYEENAME" : "shi" }
{ "_id" : ObjectId("61caf0cca3b4e131994cb3d6"), "EMPLOYEENAME" : "kri" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "EMPLOYEENAME" : "shr" }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "EMPLOYEENAME" : "dra" }
49. GET FIRST 32 and 5 FROM EMPLOYEE NAME
> db.faculty.aggregate([{$project:{EMPLOYEENAME:{$substr:["$f_name",1,3]}}}])
{ " id" : ObjectId("61caefafa3b4e131994cb3cf"), "EMPLOYEENAME" : "Kaj" }
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "EMPLOYEENAME" : "rit" }
{ "_id" : ObjectId("61caf002a3b4e131994cb3d1"), "EMPLOYEENAME" : "iya" }
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "EMPLOYEENAME" : "utu" }
{ "_id" : ObjectId("61caf042a3b4e131994cb3d3"), "EMPLOYEENAME" : "ima" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "EMPLOYEENAME" : "alp" }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "EMPLOYEENAME" : "hik" }
{ "_id" : ObjectId("61caf0cca3b4e131994cb3d6"), "EMPLOYEENAME" : "ris" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "EMPLOYEENAME" : "hru" }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "EMPLOYEENAME" : "ras" }
50.DISPLAY THE NAME OF FACULTY WITH DEPARTMENT
> db.faculty.aggregate([{$project:{EMPLOYEENAME:{$substr:["$f name",1,3]}}}])
{ "_id" : ObjectId("61caefafa3b4e131994cb3cf"), "EMPLOYEENAME" : "Kaj" }
```

```
{ "_id" : ObjectId("61caefcfa3b4e131994cb3d0"), "EMPLOYEENAME" : "rit" }
{ "_id" : ObjectId("61caf002a3b4e131994cb3d1"), "EMPLOYEENAME" : "iya" }
{ "_id" : ObjectId("61caf022a3b4e131994cb3d2"), "EMPLOYEENAME" : "utu" }
{ "_id" : ObjectId("61caf042a3b4e131994cb3d3"), "EMPLOYEENAME" : "ima" }
{ "_id" : ObjectId("61caf069a3b4e131994cb3d4"), "EMPLOYEENAME" : "alp" }
{ "_id" : ObjectId("61caf0a0a3b4e131994cb3d5"), "EMPLOYEENAME" : "hik" }
{ "_id" : ObjectId("61caf0cca3b4e131994cb3d6"), "EMPLOYEENAME" : "ris" }
{ "_id" : ObjectId("61caf0fba3b4e131994cb3d7"), "EMPLOYEENAME" : "hru" }
{ "_id" : ObjectId("61caf127a3b4e131994cb3d8"), "EMPLOYEENAME" : "ras" }
51. SORT EMPLOYEE NAME IN DESCENDIG ORDER AND DISPLAY ATLEAST 2 OREDER
db.employee.find({}).sort({"emp sal":-1}).skip(1).limit(2)
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal" : 20000, "emp_email" : "isha@gmail.com" }
{ " id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "avnigmail.com" }
52.DISPLAY THE DETAILS OF EMPLOYEE WHO EARN SALARY IN EVEN
db.employee.find({emp sal:{$mod:[2,0]}})
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "avnigmail.com" }
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "isha@gmail.com" }
{ " id" : ObjectId("61cc3932909c31bd085099f4"), "emp id" : 5, "emp name" : "kajal", "emp city"
: "ahemdabad", "emp_sal" : 30000, "emp_email" : "k@gmail.com" }
53.FIND THE EMPLOYEE WITH SAME CITY
> db.employee.aggregate([{$group:{_id:"$emp_city",sum:{$sum:"$emp_sal"}}}])
{ "_id" : "ahemdabad", "sum" : 30000 }
{ "_id" : "surat", "sum" : 40000 }
54. CREATE COPY OF EMPLYEE TABLE
db.employee.copyTo("emp_new");
WARNING: db.eval is deprecated
3
55. DISPLAY SALARY OF EMPLOYEE WITH NAME WHERE SALARY GREATEr>22000
db.employee.aggregate([{$match:{emp_sal:{$gt:22000}}}},{$group:{_id:"$emp_name",sum:
{$sum:"$emp sal"}}}])
{ "_id" : "kajal", "sum" : 30000 }
56.DELETE THE EMPLOYEE COPY TABLE
db.emp_new.drop()
true
```

57.DISPALY THE COLEEGE NAME MUST STARTS WITH "k*"

```
> db.college.find( { clg_name: { $regex: 'K.*'} } ).pretty();
{
      " id": ObjectId("61caeeaca3b4e131994cb3ce"),
      "clg_id": "10",
      "clg_name" : " K S",
      "univ": "gu",
      "city": "ahmedabad",
      "state": "gujrat"
}
58. DISPLAY THE SALARY BETWEEN 10000 TO 30000
> db.employee.find({emp_sal:{$gt:10000,$lte:30000}})
{ "_id" : ObjectId("61cc330eaa758a2d0dfa15df"), "emp_name" : "ania", "emp_city" : "surat",
"emp_sal": 20000, "emp_email": "avnigmail.com" }
{ "_id" : ObjectId("61cc3368aa758a2d0dfa15ea"), "emp_name" : "isha", "emp_city" : "surat",
"emp_sal" : 20000, "emp_email" : "isha@gmail.com" }
{ " id" : ObjectId("61cc3932909c31bd085099f4"), "emp id" : 5, "emp name" : "kajal", "emp city"
: "ahemdabad", "emp_sal" : 30000, "emp_email" : "k@gmail.com" }
59.DISPLAY TOTAL NUMBER OF RECORDS IN BOOK TABLE
db.book.find().count()
10
60. DISPLAY ALL DOCUMENTS WHICH ARE PRESENT IN COLLECTION OF BOOK
> db.book.find({title:"captch-22"}).forEach(printjson);
{
      "_id": ObjectId("61caeb7fa3b4e131994cb3bc"),
      "b_id": "2",
      "title": "captch-22",
      "author": "joseph",
      "price": "200",
      "page": "402"
}
```