

1 DISPLAY THE CUSTOMERS INFORMATION FROM CUSTOMERS TABLE.

```
> db.customers.find()
```

```
{ "_id" : ObjectId("61cac0a4635505009fbb1595"), "c_id" : 1, "c_fname" : "anjani", "c_lname" :  
"patel", "c_city" : "ahmedabad", "c_phone" : 9999999999 }  
{ "_id" : ObjectId("61cac0c5635505009fbb1596"), "c_id" : 1, "c_fname" : "anjani", "c_lname" :  
"patel", "c_city" : "ahmedabad", "c_phone" : 9999999999 }  
{ "_id" : ObjectId("61cac163635505009fbb1597"), "c_id" : 3, "c_fname" : "anji", "c_lname" :  
"patel", "c_city" : "ahmedabad", "c_phone" : 9990999999 }  
{ "_id" : ObjectId("61cac1adebd892bc2464766e"), "c_id" : 4, "c_fname" : "nisha", "c_lname" :  
"rathod", "c_city" : "surat", "c_phone" : 9990999999 }  
{ "_id" : ObjectId("61cac1ddebd892bc2464766f"), "c_id" : 5, "c_fname" : "rajvi", "c_lname" :  
"rathod", "c_city" : "mehsana", "c_phone" : 9999999 }  
{ "_id" : ObjectId("61cac207ebd892bc24647670"), "c_id" : 6, "c_fname" : "mahi", "c_lname" :  
"parmar", "c_city" : "mehsana", "c_phone" : 98989898 }  
{ "_id" : ObjectId("61cac23bebd892bc24647671"), "c_id" : 7, "c_fname" : "mahima", "c_lname" :  
"raj", "c_city" : "rajkot", "c_phone" : 898989898 }  
{ "_id" : ObjectId("61cac271ebd892bc24647672"), "c_id" : 7, "c_fname" : "nishant", "c_lname" :  
"singh", "c_city" : "surat", "c_phone" : 89896698 }  
{ "_id" : ObjectId("61cac27debd892bc24647673"), "c_id" : 8, "c_fname" : "nishant", "c_lname" :  
"singh", "c_city" : "surat", "c_phone" : 89896698 }  
{ "_id" : ObjectId("61cac2b1ebd892bc24647674"), "c_id" : 9, "c_fname" : "riya", "c_lname" :  
"thakor", "c_city" : "ahmedabad", "c_phone" : 7645896698 }  
{ "_id" : ObjectId("61cac2c4ebd892bc24647675"), "c_id" : 10, "c_fname" : "aasha", "c_lname" :  
"thakor", "c_city" : "ahmedabad", "c_phone" : 7645865698 }  
{ "_id" : ObjectId("61cac3354640fe8b127cda28"), "c_id" : 2, "c_fname" : "manvi", "c_lname" :  
"patel", "c_city" : "ahmedabad", "c_phone" : 9999999999 }
```

2 DISPLAY THE DETAILS OF ALL FACULTY.

```
> db.faculty.find()
```

```
{ "_id" : ObjectId("61cac64e4640fe8b127cda33"), "d_id" : 1, "d_name" : "nishit", "f_email" :  
"n@gmail.com", "f_pwd" : "nishit", "f_dept" : "it" }  
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_id" : 2, "d_name" : "rahul", "f_email" :  
"r@gmail.com", "f_pwd" : "rahul", "f_dept" : "it" }  
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :  
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }  
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :  
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }  
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :  
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }  
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :  
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }  
{ "_id" : ObjectId("61cac729582f4b7d9372c561"), "d_id" : 7, "d_name" : "moin", "f_email" :  
"m@gmail.com", "f_pwd" : "moin", "f_dept" : "ec" }  
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_id" : 8, "d_name" : "nidhi", "f_email" :  
"n@gmail.com", "f_pwd" : "neha", "f_dept" : "ec" }  
{ "_id" : ObjectId("61cac81b582f4b7d9372c563"), "d_id" : 9, "d_name" : "nita", "f_email" :  
"n@gmail.com", "f_pwd" : "nita", "f_dept" : "comp" }  
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_id" : 10, "d_name" : "anita", "f_email" :  
"a@gmail.com", "f_pwd" : "anita", "f_dept" : "comp" }
```

3 DISPLAY THE NAME AND DEPT FOR ALL FACULTY.

```
> db.faculty.find({}, {d_name:1,f_dept:1})
{ "_id" : ObjectId("61cac64e4640fe8b127cda33"), "d_name" : "nishit", "f_dept" : "it" }
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_name" : "rahul", "f_dept" : "it" }
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_name" : "kajal", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_name" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_name" : "kahan", "f_dept" : "civil" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_name" : "kanan", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac729582f4b7d9372c561"), "d_name" : "moin", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_name" : "nidhi", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac81b582f4b7d9372c563"), "d_name" : "nita", "f_dept" : "comp" }
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_name" : "anita", "f_dept" : "comp" }
```

4 DISPLAY D_NAME AND PASSWORD FOR ALL FACULTY.

```
> db.faculty.find({}, {d_name:1,f_pwd:1})
{ "_id" : ObjectId("61cac64e4640fe8b127cda33"), "d_name" : "nishit", "f_pwd" : "nishit" }
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_name" : "rahul", "f_pwd" : "rahul" }
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_name" : "kajal", "f_pwd" : "kajal" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_name" : "radha", "f_pwd" : "radha" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_name" : "kahan", "f_pwd" : "kahan" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_name" : "kanan", "f_pwd" : "kanan" }
{ "_id" : ObjectId("61cac729582f4b7d9372c561"), "d_name" : "moin", "f_pwd" : "moin" }
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_name" : "nidhi", "f_pwd" : "neha" }
{ "_id" : ObjectId("61cac81b582f4b7d9372c563"), "d_name" : "nita", "f_pwd" : "nita" }
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_name" : "anita", "f_pwd" : "anita" }
```

5. DISPLAY EMPLOYEE NUMBER AND TOTAL SALARY FOR EACH EMPLOYEE.

```
> db.employee.aggregate([{$group:{$_id: "$e_name", emp_sal: {$sum: "$e_salary"}}}])
{ "_id" : "manish", "emp_sal" : 10000 }
{ "_id" : "manisha", "emp_sal" : 30000 }
{ "_id" : "anjani", "emp_sal" : 20000 }
```

6. DISPLAY EMPLOYEE NAME AND ANNUAL SALARY FOR ALL EMPLOYEES.

```
> db.employee.aggregate([{$project:{$e_name:1,total:{$multiply:[$e_salary,12]}}}])
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_name" : "anjani", "total" : 240000 }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_name" : "manisha", "total" : 360000 }
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "e_name" : "manish", "total" : 120000 }
```

7. DISPLAY THE ALL STUDENTS WHO HAVE GENDER FEMALE.

```
> db.student.find({s_gender:"female"})
{ "_id" : ObjectId("61cbe96bf1bcd3f56bde167b"), "s_id" : 1, "s_name" : "anjani", "s_gender" : "female", "s_city" : "gandhinagar", "s_phone" : 457651211 }
{ "_id" : ObjectId("61cbe986f1bcd3f56bde167c"), "s_id" : 2, "s_name" : "kajal", "s_gender" : "female", "s_city" : "mumbai", "s_phone" : 99881211 }
{ "_id" : ObjectId("61cbe990f1bcd3f56bde167d"), "s_id" : 2, "s_name" : "manshi", "s_gender" : "female", "s_city" : "mumbai", "s_phone" : 75881211 }
{ "_id" : ObjectId("61cbea06f1bcd3f56bde1681"), "s_id" : 4, "s_name" : "shriya", "s_gender" : "female", "s_city" : "ahmedabad", "s_phone" : 70900000 }
{ "_id" : ObjectId("61cbea25f1bcd3f56bde1682"), "s_id" : 5, "s_name" : "nisha", "s_gender" : "female", "s_city" : "surat", "s_phone" : 70900000 }
{ "_id" : ObjectId("61cbeac5f1bcd3f56bde1685"), "s_id" : 8, "s_name" : "manisha", "s_gender" : "female", "s_city" : "gandhinagar", "s_phone" : 709128800 }
```

```
{ "_id" : ObjectId("61cbead9f1bcd3f56bde1686"), "s_id" : 8, "s_name" : "rakhi", "s_gender" :
"female", "s_city" : "gandhinagar", "s_phone" : 99128800 }
{ "_id" : ObjectId("61cbeaf0f1bcd3f56bde1687"), "s_id" : 9, "s_name" : "rajvi", "s_gender" :
"female", "s_city" : "gandhinagar", "s_phone" : 99128800 }
{ "_id" : ObjectId("61cbeafaf1bcd3f56bde1688"), "s_id" : 10, "s_name" : "rani", "s_gender" :
"female", "s_city" : "gandhinagar", "s_phone" : 99128800 }
```

8. DISPLAY THE NAMES OF ALL EMPLOYEES SALARY MORE THAN 10000.

```
> db.employee.find({$and:[{e_salary:{$gt:10000}},{e_name:{$exists:true}}]})
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_id" : 2, "e_name" : "manisha", "e_email" :
"m@gmail.com", "e_city" : "jaipur", "e_salary" : 30000 }
```

9. DISPLAY EMPLOYEE NAME AND FOR EMPLOYEES WHO EARN SALARY GREATER THEN 20000.

```
> db.employee.find({e_salary:20000},{e_name:1})
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_name" : "anjani" }
```

10. DISPLAY NAMES OF EMPLOYEES WHO DO NOT EARN ANY SALARY.

```
> db.salary.find({amt:2000},{e_name:1,e_id:0})
```

11. DISPLAY THE TYPE OF PAYMENT WHICH IS NETBANKING OR COD OR STATUS IS PENDING.

```
> db.payment.find({$or:[{p_type:"netbanking"},{type:"cod"},{status:"pending"}]},{type:1})
{ "_id" : ObjectId("61cd3ab265da428dd20b82c0"), "type" : "cod" }
{ "_id" : ObjectId("61cd3abd65da428dd20b82c1"), "type" : "cod" }
{ "_id" : ObjectId("61cd3b0465da428dd20b82c3"), "type" : "netbanking" }
```

12. DISPLAY THE DATE OF PAYMENT WHICH HAS DATE GREATER THEN 3.

```
> db.payment.find({date:{$gt:"2020"}})
{ "_id" : ObjectId("61cd3c8965da428dd20b82c5"), "p_id" : 6, "type" : "netbanking", "amt" : 500,
"status" : "pending", "date" : "8/7/2021" }
```

13. CONVERT CURRENT DATE TO STRING.

```
> {$dateFromString:{dateString:"2021-12-30T13:04:40.787"}}
2021-12-30T13:04:40.787
```

14. DISPLAY CURRENT DATE.

```
> Date()
Thu Dec 30 2021 10:30:42 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
admin
admin-data
customers
doctor
```

employee
faculty
movie
patient
payment
products
staffs
stores
student

17. DISPLAY THE NAME OF THE CURRENT USER.

```
> db.runCommand({connectionStatus:1})
{
  "authInfo" : {
    "authenticatedUsers" : [ ],
    "authenticatedUserRoles" : [ ]
  },
  "ok" : 1
}
```

18.DISPLAY THE NAMES OF FACULTY WORKING IN DEPARTMENT COMPUTER.

```
> db.faculty.find({$or:[{f_id:1},{f_id:4},{f_id:6},{f_dept:"comp"}]})
{ "_id" : ObjectId("61cac81b582f4b7d9372c563"), "d_id" : 9, "d_name" : "nita", "f_email" :
"n@gmail.com", "f_pwd" : "nita", "f_dept" : "comp" }
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_id" : 10, "d_name" : "anita", "f_email" :
"a@gmail.com", "f_pwd" : "anita", "f_dept" : "comp" }
```

19. DISPLAY THE NAMES OF FACULTY WHOSE NAME STARTS WITH ALPHABET.

```
> db.faculty.find({"d_name" : /.a./})
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_id" : 2, "d_name" : "rahul", "f_email" :
"r@gmail.com", "f_pwd" : "rahul", "f_dept" : "it" }
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }
```

20. DISPLAY NAMES FOR FACULTY WHOSE NAME ENDS WITH ALPHABET t.

```
> db.faculty.find({"d_name" : /.t/})
{ "_id" : ObjectId("61cac64e4640fe8b127cda33"), "d_id" : 1, "d_name" : "nishit", "f_email" :
"n@gmail.com", "f_pwd" : "nishit", "f_dept" : "it" }
```

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

```
> db.faculty.find({"d_name" : /.a./})
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_id" : 2, "d_name" : "rahul", "f_email" :
"r@gmail.com", "f_pwd" : "rahul", "f_dept" : "it" }
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }
```

```
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }
```

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

```
> db.faculty.find({d_name:{$type:2}, $where:"this.d_name.length==5"})
{ "_id" : ObjectId("61cac6744640fe8b127cda34"), "d_id" : 2, "d_name" : "rahul", "f_email" :
"r@gmail.com", "f_pwd" : "rahul", "f_dept" : "it" }
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_id" : 8, "d_name" : "nidhi", "f_email" :
"n@gmail.com", "f_pwd" : "neha", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_id" : 10, "d_name" : "anita", "f_email" :
"a@gmail.com", "f_pwd" : "anita", "f_dept" : "comp" }
```

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

```
> db.faculty.find({f_dept:{$nin:["it"]}})
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac729582f4b7d9372c561"), "d_id" : 7, "d_name" : "moin", "f_email" :
"m@gmail.com", "f_pwd" : "moin", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_id" : 8, "d_name" : "nidhi", "f_email" :
"n@gmail.com", "f_pwd" : "neha", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac81b582f4b7d9372c563"), "d_id" : 9, "d_name" : "nita", "f_email" :
"n@gmail.com", "f_pwd" : "nita", "f_dept" : "comp" }
{ "_id" : ObjectId("61cac82d582f4b7d9372c564"), "d_id" : 10, "d_name" : "anita", "f_email" :
"a@gmail.com", "f_pwd" : "anita", "f_dept" : "comp" }
```

24. DISPLAY THE NAMES OF EMPLOYEES WHO ARE NOT WORKING AS IT OR COMP.

```
> db.faculty.find({f_dept:{$nin:["it","comp"]}})
{ "_id" : ObjectId("61cac6924640fe8b127cda35"), "d_id" : 3, "d_name" : "kajal", "f_email" :
"k@gmail.com", "f_pwd" : "kajal", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6a64640fe8b127cda36"), "d_id" : 4, "d_name" : "radha", "f_email" :
"radha@gmail.com", "f_pwd" : "radha", "f_dept" : "ce" }
{ "_id" : ObjectId("61cac6f1582f4b7d9372c55f"), "d_id" : 5, "d_name" : "kahan", "f_email" :
"kahan@gmail.com", "f_pwd" : "kahan", "f_dept" : "civil" }
```

```
{ "_id" : ObjectId("61cac715582f4b7d9372c560"), "d_id" : 6, "d_name" : "kanan", "f_email" :
"kanan@gmail.com", "f_pwd" : "kanan", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac729582f4b7d9372c561"), "d_id" : 7, "d_name" : "moin", "f_email" :
"m@gmail.com", "f_pwd" : "moin", "f_dept" : "ec" }
{ "_id" : ObjectId("61cac7f8582f4b7d9372c562"), "d_id" : 8, "d_name" : "nidhi", "f_email" :
"n@gmail.com", "f_pwd" : "neha", "f_dept" : "ec" }
```

25. DISPLAY NAME OF THE EMPLOYEE WHOSE SALARY IS SECOND HIGHEST.

```
> db.employee.find({}).sort({"e_salary":-1}).skip(1).limit(1)
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }
```

26. DISPLAY THE TOTAL NUMBER OF EMPLOYEES WORKING IN THE AHMEDABAD CITY.

```
> db.employee.find({e_city:"ahmedabad"})
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }
```

27. DISPLAY THE TOTAL SALARY BEING PAID TO ALL EMPLOYEES.

```
> db.employee.aggregate([{$project:{total:{$multiply:["$e_salary",12]}}}])
```

```
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "total" : 240000 }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "total" : 360000 }
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "total" : 120000 }
```

28. DISPLAY THE MAXIMUM SALARY FROM EMP TABLE.

```
> db.employee.aggregate([{$group:{_id:null,e_salary:{$max:"$e_salary"}}}])
```

```
{ "_id" : null, "e_salary" : 30000 }
```

29. DISPLAY THE MINIMUM SALARY FROM EMP TABLE.

```
> db.employee.aggregate([{$group:{_id:null,e_salary:{$min:"$e_salary"}}}])
```

```
{ "_id" : null, "e_salary" : 10000 }
```

30. DISPLAY THE AVERAGE SALARY FROM EMP TABLE.

```
> db.employee.aggregate([{$group:{_id:null,e_salary:{$avg:"$e_salary"}}}])
```

```
{ "_id" : null, "e_salary" : 20000 }
```

31. DISPLAY THE MAXIMUM SALARY TO EMPLOYEE WHICH HAS CITY IS AHMEDABAD.

```
> db.employee.aggregate([{$match:{e_city:"ahmedabad"}},{ $group:{_id:"$e_city",Maximum:
{$max:"$e_salary"}}}])
{ "_id" : "ahmedabad", "Maximum" : 20000 }
```

32.DISPLAY THE MAXIMUM SALARY BEING PAID IN ID 3.

```
> db.employee.aggregate([{$match:{e_id:3}},{ $group:{_id:"$e_id",Maximum:
{$max:"$e_salary"}}}])
{ "_id" : 3, "Maximum" : 10000 }
```

33. DISPLAY THE MINIMUM SALARY TO EMPLOYEE WHICH HAS CITY IS AHMEDABAD.

```
> db.employee.aggregate([{$match:{e_city:"ahmedabad"}},{$group:{_id:"$e_city",Minimum:
{$min:"$e_salary"}}}])
{ "_id" : "ahmedabad", "Minimum" : 20000 }
```

34. DISPLAY THE AVERAGE SALARY DRAWN BY CITY

```
> db.employee.aggregate([{$match:{e_city:"ahmedabad"}},{$group:{_id:"$e_city",Average:
{$avg:"$e_salary"}}}])
{ "_id" : "ahmedabad", "Average" : 20000 }
```

35. DISPLAY THE TOTAL SALARY OF EMPLOYEE WHERE ARE FROM SPECIFIED CITY.

```
> db.employee.aggregate([{$match:{e_city:"ahmedabad"}},{$group:{_id:"e_city",salary_sum:
{$sum:"$e_salary"}}}])
{ "_id" : "e_city", "salary_sum" : 20000 }
```

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({},{$e_name:1,_id:0,e_salary:1}).sort({"e_salary":1})
{ "e_name" : "manish", "e_salary" : 10000 }
{ "e_name" : "anjani", "e_salary" : 20000 }
{ "e_name" : "manisha", "e_salary" : 30000 }
```

37. DISPLAY THE NAMES OF EMPLOYEES IN DESCENDING ORDER OF SALARY.

```
> db.employee.find().sort({"e_salary":-1})
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_id" : 2, "e_name" : "manisha", "e_email" :
"m@gmail.com", "e_city" : "jaipur", "e_salary" : 30000 }
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "e_id" : 3, "e_name" : "manish", "e_email" :
"m@gmail.com", "e_city" : "mehsana", "e_salary" : 10000 }
```

38.DISPLAY THE DETAILS FROM EMP TABLE IN ORDER OF EMP NAME

```
> db.employee.find().sort({"e_salary":1})
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "e_id" : 3, "e_name" : "manish", "e_email" :
"m@gmail.com", "e_city" : "mehsana", "e_salary" : 10000 }
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_id" : 2, "e_name" : "manisha", "e_email" :
"m@gmail.com", "e_city" : "jaipur", "e_salary" : 30000 }
```

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({"e_name":1})
{ "e_id" : 1, "e_name" : "anjani", "e_email" : "a@gmail.com", "e_city" : "ahmedabad", "e_salary" :
20000 }
{ "e_id" : 3, "e_name" : "manish", "e_email" : "m@gmail.com", "e_city" : "mehsana", "e_salary" :
10000 }
{ "e_id" : 2, "e_name" : "manisha", "e_email" : "m@gmail.com", "e_city" : "jaipur", "e_salary" :
30000 }
```

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

```
> db.employee.aggregate([{$project:{e_name:1,total:{$multiply:["$e_salary",12]}}}}])
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_name" : "anjani", "total" : 240000 }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_name" : "manisha", "total" : 360000 }
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "e_name" : "manish", "total" : 120000 }
```

41. FIND OUT THE LENGTH OF YOUR NAME USING APPROPRIATE FUNCTION.

```
> db.admin.aggregate([{$project:{a_name:1,length:{$strLenCP:"$a_name"}}}}])
{ "_id" : ObjectId("61cbec88f1bcd3f56bde1689"), "a_name" : "anjani", "length" : 6 }
{ "_id" : ObjectId("61cbeca2f1bcd3f56bde168a"), "a_name" : "rakhi", "length" : 5 }
{ "_id" : ObjectId("61cbecb4f1bcd3f56bde168b"), "a_name" : "lokesh", "length" : 6 }
{ "_id" : ObjectId("61cbec4f1bcd3f56bde168c"), "a_name" : "nikhil", "length" : 6 }
{ "_id" : ObjectId("61cbecd6f1bcd3f56bde168d"), "a_name" : "manshi", "length" : 5 }
{ "_id" : ObjectId("61cbecedf1bcd3f56bde168e"), "a_name" : "mahi", "length" : 4 }
{ "_id" : ObjectId("61cbec03f1bcd3f56bde168f"), "a_name" : "nikesh", "length" : 6 }
{ "_id" : ObjectId("61cbec11f1bcd3f56bde1690"), "a_name" : "vikas", "length" : 5 }
{ "_id" : ObjectId("61cbec20f1bcd3f56bde1691"), "a_name" : "jitesh", "length" : 6 }
{ "_id" : ObjectId("61cbec32f1bcd3f56bde1692"), "a_name" : "himanshu", "length" : 8 }
```

42. DISPLAY THE NAME OF EMPLOYEE IN LOWERCASE.

```
> db.employee.aggregate([{$project:{_id:0,e_name:{$toLower:"$e_name"}}}}])
{ "e_name" : "anjani" }
{ "e_name" : "manisha" }
{ "e_name" : "manish" }
```

43. DISPLAY THE NAME OF EMPLOYEE IN UPPERCASE.

```
> db.employee.aggregate([{$project:{_id:0,e_name:{$toUpper:"$e_name"}}}}])
{ "e_name" : "ANJANI" }
{ "e_name" : "MANISHA" }
{ "e_name" : "MANISH" }
```

44. DISPLAY THE NAME OF EMPLOYEE CONCATENATE WITH EMP EMAIL.

```
> db.employee.aggregate([{$project:{_id:0,itemDescription:{$concat:
["$e_name","-","$e_email"]}}}}])
{ "itemDescription" : "anjani-a@gmail.com" }
{ "itemDescription" : "manisha-m@gmail.com" }
{ "itemDescription" : "manish-m@gmail.com" }
```

45. DISPLAY THE LIST OF EMPLOYEES WHO HAVE JOINED THE COMPANY BEFORE 30TH JUNE 90 OR AFTER 31ST DEC 90.

```
> db.payment.find({date:{$gt:-2020,$lt:-2030}},{_id:0,type:1,date:1})
```

46. GET FIRST 3 CHARACTER FROM EMPLOYEE NAME.

```
> db.employee.aggregate([{$project:{Name: { $substr: [ "$e_name", 0, 3]}}}}])
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "Name" : "anj" }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "Name" : "man" }
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "Name" : "man" }
```

47. GET 2ND TO 5TH CHARACTER FROM EMPLOYEE NAME.

```
> db.employee.aggregate([{$project:{Name: { $substr: [ "$e_name", 1, 3]}}}}])
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "Name" : "nja" }
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "Name" : "ani" }
```



```
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "Name" : "ani" }
```

48. CONVERT STRING DATE INTO ISOFORMAT.

```
> {$year:{date:new Date("Jan 21,2021")}}  
ISODate("2021-01-20T18:30:00Z")
```

49. SORT THE CUSTOMERS BY DECENDING ORDER AND DISPLAY ONLY LAST 3 RECORDS.

```
> db.customers.find().sort({c_fname:-1}).limit(3)  
{ "_id" : ObjectId("61cac2b1ebd892bc24647674"), "c_id" : 9, "c_fname" : "riya", "c_lname" :  
"thakor", "c_city" : "ahmedabad", "c_phone" : 7645896698 }  
{ "_id" : ObjectId("61cac1ddebd892bc2464766f"), "c_id" : 5, "c_fname" : "rajvi", "c_lname" :  
"rathod", "c_city" : "mehsana", "c_phone" : 999999 }  
{ "_id" : ObjectId("61cac271ebd892bc24647672"), "c_id" : 7, "c_fname" : "nishant", "c_lname" :  
"singh", "c_city" : "surat", "c_phone" : 89896698 }
```

50. FIND SUM OF SALARY OF ALL EMPLOYEE WITH SAME LEAVE.

```
> db.employee.aggregate([{$group:{_id:"$e_city",salary_sum:{$sum:"$e_salary"}}}])  
{ "_id" : "mehsana", "salary_sum" : 10000 }  
{ "_id" : "jaipur", "salary_sum" : 30000 }  
{ "_id" : "ahmedabad", "salary_sum" : 41000 }
```

51. CREATE A COPY OF EMPLOYEE TABLE.

```
db.admin.copyTo("admindata")  
db.admindata.find()  
{ "_id" : ObjectId("61cbec88f1bcd3f56bde1689"), "a_id" : 1, "a_name" : "anjani", "a_gender" :  
"female", "a_email" : "a@gmail.com", "a_pwd" : "a123" }  
{ "_id" : ObjectId("61cbeca2f1bcd3f56bde168a"), "a_id" : 2, "a_name" : "rakhi", "a_gender" :  
"female", "a_email" : "r@gmail.com", "a_pwd" : "r123" }  
{ "_id" : ObjectId("61cbecb4f1bcd3f56bde168b"), "a_id" : 3, "a_name" : "lokes", "a_gender" :  
"male", "a_email" : "l@gmail.com", "a_pwd" : "l123" }  
{ "_id" : ObjectId("61cbecc4f1bcd3f56bde168c"), "a_id" : 4, "a_name" : "nikhil", "a_gender" :  
"male", "a_email" : "n@gmail.com", "a_pwd" : "n123" }  
{ "_id" : ObjectId("61cbecd6f1bcd3f56bde168d"), "a_id" : 5, "a_name" : "mans", "a_gender" :  
"female", "a_email" : "m@gmail.com", "a_pwd" : "m123" }  
{ "_id" : ObjectId("61cbecebf1bcd3f56bde168e"), "a_id" : 6, "a_name" : "mahi", "a_gender" :  
"female", "a_email" : "mahi@gmail.com", "a_pwd" : "m123" }  
{ "_id" : ObjectId("61cbcd03f1bcd3f56bde168f"), "a_id" : 7, "a_name" : "nikesh", "a_gender" :  
"male", "a_email" : "nikesh@gmail.com", "a_pwd" : "n123" }  
{ "_id" : ObjectId("61cbcd11f1bcd3f56bde1690"), "a_id" : 8, "a_name" : "vikas", "a_gender" :  
"male", "a_email" : "vikas@gmail.com", "a_pwd" : "v123" }  
{ "_id" : ObjectId("61cbcd20f1bcd3f56bde1691"), "a_id" : 9, "a_name" : "jites", "a_gender" :  
"male", "a_email" : "jites@gmail.com", "a_pwd" : "j123" }  
{ "_id" : ObjectId("61cbcd32f1bcd3f56bde1692"), "a_id" : 10, "a_name" : "himanshu",  
"a_gender" : "male", "a_email" : "himanshu@gmail.com", "a_pwd" : "h123" }
```

52. DISPLAY THE DETAILS OF EMPLOYEE WHO EARN SALARY IN EVEN.

```
> db.employee.find({e_salary:{$mod:[2,0]}})  
{ "_id" : ObjectId("61cc06f1b1135fb10a8d8391"), "e_id" : 1, "e_name" : "anjani", "e_email" :  
"a@gmail.com", "e_city" : "ahmedabad", "e_salary" : 20000 }  
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_id" : 2, "e_name" : "manisha", "e_email" :  
"m@gmail.com", "e_city" : "jaipur", "e_salary" : 30000 }
```

```
{ "_id" : ObjectId("61cc071db1135fb10a8d8393"), "e_id" : 3, "e_name" : "manish", "e_email" : "m@gmail.com", "e_city" : "mehsana", "e_salary" : 10000 }
{ "_id" : ObjectId("61cd687f65da428dd20b82c6"), "e_id" : 4, "e_name" : "mina", "e_email" : "m@gmail.com", "e_city" : "ahmedabad", "e_salary" : 21000 }
```

53. FIND SUM OF SALARY OF ALL EMPLOYEE WITH SAME NAME WHERE SALARY GREATER THAN 20000.

```
> db.employee.aggregate([{$match:{e_salary:{$gt:20000}}},{ $group:{_id:"$e_name",salary_sum:{$sum:"$e_salary"}}}])
{ "_id" : "mina", "salary_sum" : 21000 }
{ "_id" : "manisha", "salary_sum" : 30000 }
```

54. THE CITY NAME MUST START WITH LETTER “J”.

```
> db.employee.find({e_city: { $regex: 'j.*' } }).pretty();
{
  "_id" : ObjectId("61cc0708b1135fb10a8d8392"),
  "e_id" : 2,
  "e_name" : "manisha",
  "e_email" : "m@gmail.com",
  "e_city" : "jaipur",
  "e_salary" : 30000
}
```

55. DELETE THE ADMINDATA TABLE.

```
> db.admindata.drop()
true
```

56. DISPLAY THE EMPLOYEE DETAILS WHOSE SALARY BETWEEN 20000 TO 30000.

```
> db.employee.find({e_salary:{$gt:20000,$lte:30000}})
{ "_id" : ObjectId("61cc0708b1135fb10a8d8392"), "e_id" : 2, "e_name" : "manisha", "e_email" : "m@gmail.com", "e_city" : "jaipur", "e_salary" : 30000 }
{ "_id" : ObjectId("61cd687f65da428dd20b82c6"), "e_id" : 4, "e_name" : "mina", "e_email" : "m@gmail.com", "e_city" : "ahmedabad", "e_salary" : 21000 }
```

57. DISPLAY THE TOTAL NUMBER OF ROWS IN ADMIN TABLE.

```
> db.admin.find().count()
10
```

58. DISPLAY ALL THE DOCUMENT WHICH ARE PRESENT IN COLLECTIONS.

```
> db.employee.find({e_name:"anjani"}).forEach(printjson);
{
  "_id" : ObjectId("61cc06f1b1135fb10a8d8391"),
  "e_id" : 1,
  "e_name" : "anjani",
  "e_email" : "a@gmail.com",
  "e_city" : "ahmedabad",
  "e_salary" : 20000
}
```

59. DISPLAY ALL EMPLOYEES WITH THERE DEPT NAME.

```
> db.faculty.aggregate([{$project:{'_id':0,Employee:{$concat:["$d_name","-","$f_dept"]}}}])
{ "Employee" : "nishit-it" }
```

```

{ "Employee" : "rahul-it" }
{ "Employee" : "kajal-ce" }
{ "Employee" : "radha-ce" }
{ "Employee" : "kahan-civil" }
{ "Employee" : "kanan-ec" }
{ "Employee" : "moin-ec" }
{ "Employee" : "nidhi-ec" }
{ "Employee" : "nita-comp" }
{ "Employee" : "anita-comp" }

```

60. DISPLAY ALL ROWS FROM PAYMENT TABLE.

```

> db.payment.find().pretty()
{
  "_id" : ObjectId("61cd3ab265da428dd20b82c0"),
  "p_id" : 1,
  "type" : "cod",
  "amt" : 20000,
  "status" : "pending",
  "date" : -2011
}
{
  "_id" : ObjectId("61cd3abd65da428dd20b82c1"),
  "p_id" : 2,
  "type" : "cod",
  "amt" : 2000,
  "status" : "pending",
  "date" : -2012
}
{
  "_id" : ObjectId("61cd3ad465da428dd20b82c2"),
  "p_id" : 3,
  "type" : "online",
  "amt" : 500,
  "status" : "pass",
  "date" : -2002
}
{
  "_id" : ObjectId("61cd3b0465da428dd20b82c3"),
  "p_id" : 4,
  "type" : "netbanking",
  "amt" : 500,
  "status" : "pending",
  "date" : -2002
}
{
  "_id" : ObjectId("61cd3bf865da428dd20b82c4"),
  "p_id" : 5,
  "type" : "netbanking",
  "amt" : 500,
  "status" : "pending",
  "date" : 0.0005654909168021488
}

```

```
{
  "_id" : ObjectId("61cd3c8965da428dd20b82c5"),
  "p_id" : 6,
  "type" : "netbanking",
  "amt" : 500,
  "status" : "pending",
  "date" : "8/7/2021"
}
```

