TE IT

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Create employee collection in company database and insert at least 10 employee information in employee collection containing eid, ename, disignation, hiredate, salary, department.

Execute following queries on employee collection.

a) List the total salaries paid to the employees.

b) List the maximum, minimum and average salary in the company.

```
Command Prompt - mongo                                                      —  □  ×
> db.employee.aggregate({$group:{_id:"ID", Min_Salary:{$min:"$salary"}, Max_Salary:{$max:"$salary"}, Avg_Salary:{$avg:"$ ^
salary"}}})
{ "_id" : "ID", "Min_Salary" : 8000, "Max_Salary" : 50000, "Avg_Salary" : 22425 }
>
```

c) List details of employees whose department is Sales and salary is 10000.

```
> db.employee.find({department:"Sales", salary:10000})
{ "_id" : ObjectId("5f982a2981ccaf7249ff5fb3"), "eid" : 7521, "ename" : "Ward", "designation" : "Salesman", "hiredate" :
ISODate("1982-02-22T00:00:00Z"), "salary" : 10000, "department" : "Sales" }
```

d) List the total salary of all employees whose salary is gretter than 15000.

```
> db.employee.aggregate([{$match:{salary:{$gt:15000}}},{$group:{_id:"ID",Total_Salary_above_150000:{$sum:"$salary"}}}])
{ "_id" : "ID", "Total_Salary_above_150000" : 178750 }
>
```

e) List the details of employee whose salary is maximum in the company.

```
> db.employee.find({}).sort({"salary":-1}).limit(1)
{ "_id" : ObjectId("5f982b2e81ccaf7249ff5fb9"), "eid" : 7839, "ename" : "King", "designation" : "President", "hiredate"
: ISODate("1981-11-17T00:00:00Z"), "salary" : 50000, "department" : "Engg" }
>
```

f) List the details of employees whose salary is 4th & 5th top most in the company.

```
> db.employee.find({}).sort({"salary":-1}).limit(2).skip(3)
{ "_id" : ObjectId("5f982b0a81ccaf7249ff5fb6"), "eid" : 7698, "ename" : "Blake", "designation" : "Manager", "hiredate" :
ISODate("1981-05-08T00:00:00Z"), "salary" : 28500, "department" : "Sales" }
{ "_id" : ObjectId("5f982b1981ccaf7249ff5fb7"), "eid" : 7782, "ename" : "Clark", "designation" : "Manager", "hiredate" :
ISODate("1981-06-09T00:00:00Z"), "salary" : 24500, "department" : "Engg" }
>
```

g) List the 2nd lowermost salary paid employee from company.

```
> db.employee.find({}).sort({"salary":1}).limit(1).skip(1)
{ "_id" : ObjectId("5f982a2981ccaf7249ff5fb3"), "eid" : 7521, "ename" : "Ward", "designation" : "Salesman", "hiredate" :
ISODate("1982-02-22T00:00:00Z"), "salary" : 10000, "department" : "Sales" }
>
```

h) List the top three salary paid employee from the company.

```
> db.employee.find({}).sort({"salary":-1}).limit(3)
{ "_id" : ObjectId("5f982b2e81ccaf7249ff5fb9"), "eid" : 7839, "ename" : "King", "designation" : "President", "hiredate"
: ISODate("1981-11-17T00:00:00Z"), "salary" : 50000, "department" : "Engg" }
{ "_id" : ObjectId("5f982b2681ccaf7249ff5fb8"), "eid" : 7788, "ename" : "Scott", "designation" : "Analyst", "hiredate" :
ISODate("1982-12-09T00:00:00Z"), "salary" : 30000, "department" : "Accounts" }
{ "_id" : ObjectId("5f982ad181ccaf7249ff5fb4"), "eid" : 7566, "ename" : "Jones", "designation" : "Manager", "hiredate" :
ISODate("1981-04-02T00:00:00Z"), "salary" : 29750, "department" : "Accounts" }
```

i) List the total number of employee working in each departments.

```
> db.employee.aggregate([{$group: {_id: "$department",total_employee_count: {$sum: 1 }}}])
{ "_id" : "Accounts", "total_employee_count" : 3 }
{ "_id" : "Sales", "total_employee_count" : 5 }
{ "_id" : "Engg", "total_employee_count" : 2 }
```

j) List the maximum,minimum and average salary of each departments.

```
@(shell):1:1
> db.employee.aggregate([{$group: {_id: "$department",max_salary: {$max: "$salary" },min_salary: {$min: "$salary"},avera
ge_salary: {$avg: "$salary"}}}])
{ "_id" : "Accounts", "max_salary" : 30000, "min_salary" : 8000, "average_salary" : 22583.333333333332 }
{ "_id" : "Sales", "max_salary" : 28500, "min_salary" : 10000, "average_salary" : 16400 }
{ "_id" : "Engg", "max_salary" : 50000, "min_salary" : 24500, "average_salary" : 37250 }
>
```

k) List the all employees in ascedeing order according to ename.

```
> db.employee.find().sort({"ename":1})
{ "_id" : ObjectId("5f982a0981ccaf7249ff5fb2"), "eid" : 7499, "ename" : "Allen", "designation" : "Salesman", "hiredate" : ISODate("1981-02-10T00:00:00Z"), "salary" : 16000, "department" : "Sales" }
{ "_id" : ObjectId("5f982b0a81ccaf7249ff5fb6"), "eid" : 7698, "ename" : "Blake", "designation" : "Manager", "hiredate" : ISODate("1981-05-08T00:00:00Z"), "salary" : 28500, "department" : "Sales" }
{ "_id" : ObjectId("5f982b1981ccaf7249ff5fb7"), "eid" : 7782, "ename" : "Clark", "designation" : "Manager", "hiredate" : ISODate("1981-06-09T00:00:00Z"), "salary" : 24500, "department" : "Engg" }
{ "_id" : ObjectId("5f982ad181ccaf7249ff5fb4"), "eid" : 7566, "ename" : "Jones", "designation" : "Manager", "hiredate" : ISODate("1981-04-02T00:00:00Z"), "salary" : 29750, "department" : "Accounts" }
{ "_id" : ObjectId("5f982b2e81ccaf7249ff5fb9"), "eid" : 7839, "ename" : "King", "designation" : "President", "hiredate" : ISODate("1981-11-17T00:00:00Z"), "salary" : 50000, "department" : "Engg" }
{ "_id" : ObjectId("5f982ae481ccaf7249ff5fb5"), "eid" : 7654, "ename" : "Martin", "designation" : "Salesman", "hiredate" : ISODate("1983-05-28T00:00:00Z"), "salary" : 12500, "department" : "Sales" }
{ "_id" : ObjectId("5f982b2681ccaf7249ff5fb8"), "eid" : 7788, "ename" : "Scott", "designation" : "Analyst", "hiredate" : ISODate("1982-12-09T00:00:00Z"), "salary" : 30000, "department" : "Accounts" }
{ "_id" : ObjectId("5f9829d781ccaf7249ff5fb1"), "eid" : 7369, "ename" : "Smith", "designation" : "Clerk", "hiredate" : ISODate("1980-12-17T00:00:00Z"), "salary" : 8000, "department" : "Accounts" }
{ "_id" : ObjectId("5f982c1e81ccaf7249ff5fbf"), "eid" : 7844, "ename" : "Turner", "designation" : "Salesman", "hiredate" : ISODate("1981-09-08T00:00:00Z"), "salary" : 15000, "department" : "Sales" }
{ "_id" : ObjectId("5f982a2981ccaf7249ff5fb3"), "eid" : 7521, "ename" : "Ward", "designation" : "Salesman", "hiredate" : ISODate("1982-02-22T00:00:00Z"), "salary" : 10000, "department" : "Sales" }
>
```

l) List the total number of employee present in employee collection.

```
> db.employee.aggregate([{$count:"Number of Employees"}])
{ "Number of Employees" : 10 }
```