1.Get the 3rd highest salary



Fig-1: Get the nth highest salary

Select sal from employee order by sal desc limit n-1,1; to get the nth largest salary

2.Department-wise data:

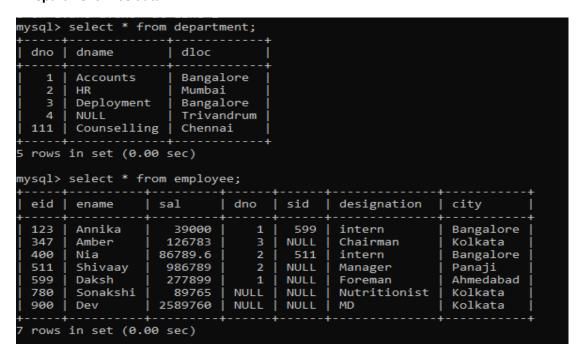


Fig-2: Employee and department tables

```
MySQL 8.0 Command Line Client
ysql> select d.dname,max(e.sal) from department d natural join employee e group by e.dno;
             max(e.sal)
                   277899
 Accounts
 Deployment
                   126783
                   986789
 rows in set (0.00 sec)
mysql> select d.dname,min(e.sal) from department d natural join employee e group by e.dno;
             | min(e.sal) |
                    39000
 Accounts
 Deployment
                   126783
                  86789.6
 rows in set (0.00 sec)
nysql> select d.dname,avg(e.sal) from department d natural join employee e group by e.dno;
             | avg(e.sal)
                     158449.5
 Accounts
                  126782.90625
              536789.29296875
 rows in set (0.00 sec)
mysql> select d.dname,count(e.eid) from department d natural join employee e group by e.dno;
              count(e.eid)
 Accounts
 Deployment
 rows in set (0.00 sec)
```

Fig-3: Department-wise minimum salary, maximum salary, number of employees, average salary

3. Display odd records/even records(alternate records):

- -use rownum. Rownum is a pseudo-column which numbers rows of the table, starting from 1.
- -rownum cannot be used with *
- -rownum has no physical record
- -get the nth record, get alternate records etc., using rownum

```
from employee order by eid desc limit 2;
                                            designation
 900
       Dev
                  2589760
                             NULL
                                    NULL
                                            MD
                                                           Kolkata
                    89765
       Sonakshi
                            NULL
                                    NULL
                                           Nutritionist
                                                           Kolkata
 780
rows in set (0.00 sec)
ysql> select * from employee order by eid limit 2;
                         dno
eid
       ename
                sal
                                 sid
                                        designation |
       Annika
                 39000
                                  599
                                        intern
                                                       Bangalore
       Amber
                 126783
                                 NULL
                                        Chairman
                                                       Kolkata
rows in set (0.00 sec)
nysql> select * from employee;
eid
       ename
                  sal
                             dno
                                  sid
                                           designation
                                                           city
                     39000
                                     599
 123
       Annika
                                            intern
                                                           Bangalore
 347
                    126783
                                                           Kolkata
       Amber
                                    NULL
                                            Chairman
                  86789.6
                                                           Bangalore
400
       Nia
                                            intern
       Shivaay
                   986789
                                2
                                    NULL
                                            Manager
                                                           Panaji
 599
       Daksh
                    277899
                                            Foreman
                                                           Ahmedabad
 780
       Sonakshi
                    89765
                             NULL
                                    NULL
                                            Nutritionist
                                                           Kolkata
 900
       Dev
                  2589760
                             NULL
                                    NULL
                                            MD
                                                           Kolkata
rows in set (0.00 sec)
nysql> _
```

Fig-4: Get the 1st N rows or last N rows

```
MySQL 8.0 Command Line Client
nysql> select designation from employee group by designation having count(designation) >1 ;
 designation
 intern
 row in set (0.00 sec)
ysql> select * from employee;
 eid | ename
                           dno
                                   sid
                                          designation
                 sal
                                                           city
                                     599
       Annika
                     39000
                                            intern
                                                           Bangalore
 347
       Amber
                    126783
                                     NULL
                                            Chairman
                                                           Kolkata
 400
                   86789.6
                                     511
                                            intern
                                                            Bangalore
       Shivaay
                    986789
                                     NULL
                                            Manager
                                                            Panaji
 599
                    277899
                                     NULL
                                                           Ahmedabad
       Daksh
                                            Foreman
                     89765
                             NULL
                                    NULL
                                            Nutritionist
                                                           Kolkata
 780
        Sonakshi
 900
       Dev
                   2589760
                             NULL
                                    NULL
                                            MD
                                                           Kolkata
 rows in set (0.00 sec)
nysql> 🕳
```

Fig-5: Retrieve duplicate data

Duplicate data occurs more than once. So, use count() to get frequency and then wherever freq>1