

- **mysql> use hrcopydatabase;**
- **mysql> create table employees(EMPLOYEE\_ID int , FIRST\_NAME varchar(50), LAST\_NAME varchar(30),EMAIL varchar(20), PHONE\_NUMBER varchar(10), HIRE\_DATE date, JOB\_ID varchar(20), SALARY double, COMMISSION\_PCT int, MANAGER\_ID int, DEPARTMENT\_ID int);**
- Query OK, 0 rows affected (0.64 sec)

- **mysql> desc employees;**

- +-----+-----+-----+-----+-----+
- | Field | Type | Null | Key | Default | Extra |
- +-----+-----+-----+-----+-----+
- | EMPLOYEE\_ID | int | YES | | NULL | |
- | FIRST\_NAME | varchar(50) | YES | | NULL | |
- | LAST\_NAME | varchar(30) | YES | | NULL | |
- | EMAIL | varchar(20) | YES | | NULL | |
- | PHONE\_NUMBER | varchar(10) | YES | | NULL | |
- | HIRE\_DATE | date | YES | | NULL | |
- | JOB\_ID | varchar(20) | YES | | NULL | |
- | SALARY | double | YES | | NULL | |
- | COMMISSION\_PCT | int | YES | | NULL | |
- | MANAGER\_ID | int | YES | | NULL | |
- | DEPARTMENT\_ID | int | YES | | NULL | |
- +-----+-----+-----+-----+-----+
- 11 rows in set (0.02 sec)

- **mysql> insert into employees values(100,'Steven','King','SKING',5151234567, '1987-06-17' , 'AD\_PRES', 24000.00, 0.00 , 0 , 90 );**
- Query OK, 1 row affected (0.03 sec)

- **mysql> insert into employees values(101,' Neena',' Kochhar','NKOCHHAR', 5151234568,'1987-06-18 ',' AD\_VP', 17000.00 , 0.00, 100,90);**
- Query OK, 1 row affected, 1 warning (0.03 sec)
  
- **mysql> insert into employees values(102,'Lex ', 'De Haan',' LDEHAAN', 5151234569,' 1987-06-19',' AD\_VP', 17000.00 , 0.00 , 100 , 90 );**
- Query OK, 1 row affected, 1 warning (0.03 sec)
  
- **mysql> insert into employees values(103 ,' Alexander' , ' Hunold ' , ' AHUNOLD' , 5904234567,'1987-06-20 ',' IT\_PROT', 9000.00 , 0.00 , 102 , 60 );**
- Query OK, 1 row affected, 1 warning (0.02 sec)
  
- **mysql> insert into employees values(104 ,'Bruce','Ernst' , 'BERNST',5904234568 ,'1987-06-21' , 'IT\_PROG' ,6000.00 ,0.00 ,103 ,60 );**
- Query OK, 1 row affected (0.03 sec)
  
- **mysql> insert into employees values(105 ,'David' , 'Austin ' , 'DAUSTIN ' ,5904234569,'1987-06-22 ','IT\_PROG ',4800.00 ,0.00 ,103 ,60 );**
- Query OK, 1 row affected, 1 warning (0.02 sec)
  
- **mysql> insert into employees values(106,'Valli','Pataballa' , 'VPATABAL' ,5904234560 ,'1987-06-23' , 'IT\_PROG' ,4800.00 ,0.00 ,103 ,60 );**
- Query OK, 1 row affected (0.02 sec)
  
- **mysql> insert into employees values(107, 'Diana', 'Lorentz ' , 'DLORENTZ ' ,5904235567 , '1987-06-24' , 'IT\_PROG ' ,4200.00 ,0.00 ,103 ,60 );**
- Query OK, 1 row affected (0.02 sec)

- **mysql> insert into employees values(108 , 'Nancy' , 'Greenberg' , 'NGREENBE ',5151244569,'1987-06-25' , 'FI\_MGR ' ,12000.00 ,0.00 ,101 ,100);**
- Query OK, 1 row affected (0.03 sec)
- **mysql> insert into employees values(110, 'John' , 'Chen' , 'JCHEN ',5151244269,'1987-06-27','FI\_ACCOUNT' , 8200.00 , 0.00 , 108,100);**
- Query OK, 1 row affected (0.03 sec)
- **mysql> insert into employees values(111, 'Ismael ' , 'Sciarra','ISCIARRA' , 5151244369, '1987-06-28' , ' FI\_ACCOUNT ' ,7700.00 , 0.00,108,100);**
- Query OK, 1 row affected (0.03 sec)
- **mysql> insert into employees values(112, 'Jose Manuel ' , 'Urman' , 'JMURMAN ' ,5151244469,'1987-06-29' , 'FI\_ACCOUNT ' ,7800.00,0.00 ,108 ,100 );**
- Query OK, 1 row affected (0.02 sec)
- **mysql> insert into employees values(113, 'Luis' , 'Popp ' , 'LPOPP' ,5151244567 , '1987-06-30','FI\_ACCOUNT' ,6900.00,0.00,108,100 );**
- Query OK, 1 row affected (0.03 sec)
- **mysql> insert into employees values(114,'Den' , 'Raphaely' , 'DRAPHEAL ' , 5151274561 , '1987-07-01' , 'PU\_MAN' ,11000.00,0.00 ,100,30 );**
- Query OK, 1 row affected (0.02 sec)
- **mysql> insert into employees values ( 115 , ' Alexander' , ' Khoo ' , ' AKHOO' , 5151274562 , '987-07-02' , ' PU\_CLERK ' ,3100.00 , 0.00 ,114, 30 );**
- Query OK, 1 row affected (0.03 sec)
- **mysql> select \* from employees;**

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
100	Steven	King	SKING	5151234567	1987-06-17	AD_PRES	24000	0	0	90
101	Neena	Kochhar	NKOCHHAR	5151234568	1987-06-18	AD_VP	17000	0	100	90
102	Lex	De Haan	LDEHAAN	5151234569	1987-06-19	AD_VP	17000	0	100	90
103	Alexander	Hunold	AHUNOLD	5904234567	1987-06-20	IT_PROG	9000	0	102	60
104	Bruce	Ernst	BERNST	5904234568	1987-06-21	IT_PROG	6000	0	103	60
105	David	Austin	DAUSTIN	5904234569	1987-06-22	IT_PROG	4800	0	103	60
106	Valli	Pataballa	VPATABAL	5904234560	1987-06-23	IT_PROG	4800	0	103	60
107	Diana	Lorentz	DLORENTZ	5904235567	1987-06-24	IT_PROG	4200	0	103	60
108	Nancy	Greenberg	NGREENBE	5151244569	1987-06-25	FI_MGR	12000	0	101	100
109	Daniel	Faviet	DFAVIET	5151244169	1987-06-26	FI_ACCOUNT	9000	0	108	100
110	John	Chen	JCHEN	5151244269	1987-06-27	FI_ACCOUNT	8200	0	108	100
111	Ismael	Sciarra	ISCIARRA	5151244369	1987-06-28	FI_ACCOUNT	7700	0	108	100
112	Jose Manuel	Urman	JMURMAN	5151244469	1987-06-29	FI_ACCOUNT	7800	0	108	100
113	Luis	Popp	LPOPP	5151244567	1987-06-30	FI_ACCOUNT	6900	0	108	100
114	Den	Raphaely	DRAPHEAL	5151274561	1987-07-01	PU_MAN	11000	0	100	30

- | 115 | Alexander | Khoo | AKHOO | 5151274562 | 0987-07-02 | PU\_CLERK | 3100 | 0 | 114 | 30 |
- +-----+-----+-----+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+-----+-----+-----+-----+
- 16 rows in set (0.00 sec)

### 1. Write a query to list the number of jobs available in the employees table

```
mysql> select count(job_id) as number_of_jobs from employees;
```

```
+-----+
| number_of_jobs |
+-----+
|          16 |
+-----+
1 row in set (0.02 sec)
```

### 2. Write a query to get the total salaries payable to employees.

```
mysql> select sum(salary) as Total_Salaries_Payable from employees;
```

```
+-----+
| Total_Salaries_Payable |
+-----+
|          152500 |
+-----+
1 row in set (0.00 sec)
```

### 3. Write a query to get the minimum salary from employees table.

```
mysql> select min(salary) as Minimun_Salary from employees;
```

```
+-----+
| Minimun_Salary |
+-----+
|          3100 |
+-----+
1 row in set (0.01 sec)
```

**4. Write a query to get the maximum salary of an employee working as a Programmer.**

```
mysql> select max(salary) as Maximun_Salary from employees where  
job_id='it_prog' ;
```

```
+-----+
```

```
| Maximun_Salary |
```

```
+-----+
```

```
|      6000 |
```

```
+-----+
```

**1 row in set (0.01 sec)**

**5. Write a query to get the average salary and number of employees working the department 90.**

```
mysql> select avg(Salary)as Average_Salary,count(employee_id)as  
Number_OF_Employees from employees where department_id=90;
```

```
+-----+-----+
```

```
| Average_Salary | Number_OF_Employees |
```

```
+-----+-----+
```

```
| 19333.33333333332 |      3 |
```

```
+-----+-----+
```

**1 row in set (0.00 sec)**

**6. Write a query to get the highest, lowest, sum, and average salary of all employees.**

```
mysql> select max(salary)as Highest_Salary,min(salary) as
Lowest_Salary,sum(Salary) as Total_Salary,avg(salary)as Average_Salary from
employees;
```

```
+-----+-----+-----+-----+
| Highest_Salary | Lowest_Salary | Total_Salary | Average_Salary |
+-----+-----+-----+-----+
|      24000 |      3100 |    152500 |    9531.25 |
+-----+-----+-----+-----+
```

1 row in set (0.00 sec)

**7. Write a query to get the number of employees with the same job.**

```
mysql> select job_id,count(*) from employees group by job_id;
```

```
+-----+-----+
| job_id | count(*) |
+-----+-----+
| AD_PRES |      1 |
| AD_VP   |      2 |
| IT_PROT |      1 |
| IT_PROG |      1 |
| IT_PROG |      3 |
| FI_MGR   |      1 |
| FI_ACCOUNT |      3 |
| FI_ACCOUNT |      1 |
| FI_ACCOUNT |      1 |
| PU_MAN   |      1 |
| PU_CLERK |      1 |
+-----+-----+
```

11 rows in set (0.01 sec)

**8. Write a query to get the difference between the highest and lowest salaries.**

```
mysql> select max(salary)-min(salary)as Difference from employees;
```

```
+-----+
| Difference |
+-----+
|    20900 |
+-----+
```

```
+-----+
```

```
1 row in set (0.01 sec)
```

**9. Write a query to find the manager ID and the salary of the lowest-paid employee for that manager.**

```
mysql> select manager_id,min(salary)from employees where manager_id is  
not null group by Manager_id order by min(salary)DESC;
```

```
+-----+-----+
```

```
| manager_id | min(salary) |
```

```
+-----+-----+
```

```
|      0 |    24000 |
```

```
|    101 |    12000 |
```

```
|    100 |    11000 |
```

```
|    102 |     9000 |
```

```
|    108 |     6900 |
```

```
|    103 |     4200 |
```

```
|    114 |     3100 |
```

```
+-----+-----+
```

```
7 rows in set (0.00 sec)
```

**10. Write a query to get the department ID and the total salary payable in each department.**

```
mysql> select department_id,sum(salary)as Total from employees group  
by department_id;
```

```
+-----+-----+
```

```
| department_id | Total |
```

```
+-----+-----+
```

```
|      90 | 58000 |
```

```
|      60 | 28800 |
```

```
|     100 | 51600 |
```

```
|      30 | 14100 |
```



```
+-----+-----+
```

```
4 rows in set (0.00 sec)4 rows in set (0.01 sec)
```

**11. Write a query to get the average salary for each job ID excluding programmer.**

```
mysql> select job_id,avg(salary) from employees where job_id<>'it_prog'
group by job_id;
```

```
+-----+-----+
```

```
| job_id    | avg(salary) |
```

```
+-----+-----+
```

```
| AD_PRES   |          24000 |
```

```
| AD_VP     |          17000 |
```

```
| IT_PROT   |           9000 |
```

```
| IT_PROG   |           4600 |
```

```
| FI_MGR    |          12000 |
```

```
| FI_ACCOUNT | 8033.333333333333 |
```

```
| FI_ACCOUNT |           7700 |
```

```
| FI_ACCOUNT |           7800 |
```

```
| PU_MAN    |          11000 |
```

```
| PU_CLERK  |           3100 |
```

```
+-----+-----+
```

```
10 rows in set (0.01 sec)
```

**12. Write a query to get the total salary, maximum, minimum, average salary of employees (job ID wise), for department ID 90 only.**

```
mysql> select job_id,sum(salary),min(salary),max(salary),avg(salary)from
employees where department_id=90 group by job_id;
```

```
+-----+-----+-----+-----+-----+
```

```
| job_id | sum(salary) | min(salary) | max(salary) | avg(salary) |
```

```
+-----+-----+-----+-----+-----+
```

```
| AD_PRES |      24000 |      24000 |      24000 |      24000 |
```

```
| AD_VP   |      34000 |      17000 |      17000 |      17000 |
```

```
+-----+-----+-----+-----+-----+
```

2 rows in set (0.00 sec)

**13. Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to \$4000.**

```
mysql> select job_id,max(salary) from employees group by job_id having max(salary)>=4000;
```

job_id	max(salary)
AD_PRES	24000
AD_VP	17000
IT_PROT	9000
IT_PROG	6000
IT_PROG	4800
FI_MGR	12000
FI_ACCOUNT	9000
FI_ACCOUNT	7700
FI_ACCOUNT	7800
PU_MAN	11000

10 rows in set (0.00 sec)

**14. Write a query to get the average salary for all departments employing more than 10 employees.**

```
mysql> SELECT department_id, AVG(salary), COUNT(*) FROM employees GROUP BY department_id HAVING COUNT(*) > 10;
```

Empty set (0.00 sec)