PayRollService Sql

Queries According to Use Cases -

**1) UC1**

mysql> create database payroll\_services;

Query OK, 1 row affected (0.14 sec)

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| addressbook |

| information\_schema |

| mysql |

| payroll\_service |

| payroll\_services |

| performance\_schema |

| sys |

| test |

+--------------------+

8 rows in set (0.00 sec)

mysql> use payroll\_services;

Database changed

**2) UC2**

mysql> create table employee\_payroll ( employee\_id int not null, name varchar(150) not null, salary int not null, start\_date date not null);

Query OK, 0 rows affected (1.31 sec)

mysql> desc employee\_payroll;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| employee\_id | int | NO | | NULL | |

| name | varchar(150) | NO | | NULL | |

| salary | int | NO | | NULL | |

| start\_date | date | NO | | NULL | |

+-------------+--------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

**3)UC3**

mysql> insert into employee\_payroll ( employee\_id,name,salary,start\_date ) values (1404,'Mark',250000,'2018-09-01'),(1504,'Bill',300000,'2018-04-03'),(1245,'Sherlock',400000,'2019-05-08');

Query OK, 3 rows affected (0.35 sec)

Records: 3 Duplicates: 0 Warnings: 0

**4) UC4**

mysql> select \* from employee\_payroll;

+-------------+----------+--------+------------+

| employee\_id | name | salary | start\_date |

+-------------+----------+--------+------------+

| 1404 | Mark | 250000 | 2018-09-01 |

| 1504 | Bill | 300000 | 2018-04-03 |

| 1245 | Sherlock | 400000 | 2019-05-08 |

+-------------+----------+--------+------------+

3 rows in set (0.00 sec)

**5)UC5**

mysql> select salary from employee\_payroll where name='Bill';

+--------+

| salary |

+--------+

| 300000 |

+--------+

1 row in set (0.00 sec)

mysql> select \* from employee\_payroll where start\_date between cast('2018-01-01' as date) and date(now());

+-------------+----------+--------+------------+

| employee\_id | name | salary | start\_date |

+-------------+----------+--------+------------+

| 1404 | Mark | 250000 | 2018-09-01 |

| 1504 | Bill | 300000 | 2018-04-03 |

| 1245 | Sherlock | 400000 | 2019-05-08 |

+-------------+----------+--------+------------+

3 rows in set (0.05 sec)

**6) UC6**

mysql> alter table employee\_payroll add gender varchar(100) after name;

Query OK, 0 rows affected (2.01 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee\_payroll;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| employee\_id | int | NO | | NULL | |

| name | varchar(150) | NO | | NULL | |

| gender | varchar(100) | YES | | NULL | |

| salary | int | NO | | NULL | |

| start\_date | date | NO | | NULL | |

+-------------+--------------+------+-----+---------+-------+

5 rows in set (0.01 sec)

mysql> update employee\_payroll set gender='M' where name='Bill';

Query OK, 1 row affected (0.09 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update employee\_payroll set gender='M' where name='Mark';

Query OK, 1 row affected (0.17 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update employee\_payroll set gender='M' where name='Sherlock';

Query OK, 1 row affected (0.14 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from employee\_payroll;

+-------------+----------+--------+--------+------------+

| employee\_id | name | gender | salary | start\_date |

+-------------+----------+--------+--------+------------+

| 1404 | Mark | M | 250000 | 2018-09-01 |

| 1504 | Bill | M | 300000 | 2018-04-03 |

| 1245 | Sherlock | M | 400000 | 2019-05-08 |

+-------------+----------+--------+--------+------------+

3 rows in set (0.00 sec)

**7)UC7**

mysql> insert into employee\_payroll ( employee\_id,name,gender,salary,start\_date ) values (1475,'Juli','F',250000,'2018-08-01'),(1604,'Marry','F',305000,'2019-04-03'),(1249,'Radha','F',420000,'20

Query OK, 3 rows affected (0.15 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select sum(salary) from employee\_payroll where gender='F' group by gender;

+-------------+

| sum(salary) |

+-------------+

| 975000 |

+-------------+

1 row in set (0.06 sec)

mysql> select sum(salary) from employee\_payroll where gender='F' ;

+-------------+

| sum(salary) |

+-------------+

| 975000 |

+-------------+

1 row in set (0.00 sec)

mysql> select sum(salary) from employee\_payroll where gender='F' group by gender;

+-------------+

| sum(salary) |

+-------------+

| 975000 |

+-------------+

1 row in set (0.00 sec)

mysql> select avg(salary) from employee\_payroll where gender='F' group by gender;

+-------------+

| avg(salary) |

+-------------+

| 325000.0000 |

+-------------+

1 row in set (0.00 sec)

mysql> select min(salary) from employee\_payroll where gender='F' group by gender;

+-------------+

| min(salary) |

+-------------+

| 250000 |

+-------------+

1 row in set (0.04 sec)

mysql> select max(salary) from employee\_payroll where gender='F' group by gender;

+-------------+

| max(salary) |

+-------------+

| 420000 |

+-------------+

1 row in set (0.00 sec)

mysql> select count(salary) from employee\_payroll where gender='F' group by gender;

+---------------+

| count(salary) |

+---------------+

| 3 |

+---------------+

1 row in set (0.00 sec)

mysql> select count(salary) from employee\_payroll where gender='M' group by gender;

+---------------+

| count(salary) |

+---------------+

| 3 |

+---------------+

1 row in set (0.00 sec)

mysql> select max(salary) from employee\_payroll where gender='M' group by gender;

+-------------+

| max(salary) |

+-------------+

| 400000 |

+-------------+

1 row in set (0.00 sec)

mysql> select min(salary) from employee\_payroll where gender='M' group by gender;

+-------------+

| min(salary) |

+-------------+

| 250000 |

+-------------+

1 row in set (0.00 sec)

mysql> select sum(salary) from employee\_payroll where gender='M' group by gender;

+-------------+

| sum(salary) |

+-------------+

| 950000 |

+-------------+

1 row in set (0.00 sec)

mysql> select avg(salary) from employee\_payroll where gender='M' group by gender;

+-------------+

| avg(salary) |

+-------------+

| 316666.6667 |

+-------------+

1 row in set (0.00 sec)

**8)UC8**

mysql> alter table employee\_payroll add address varchar(150) default 'TBD' after gender;

Query OK, 0 rows affected (1.57 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add phone bigint after gender;

Query OK, 0 rows affected (1.55 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add department varchar(150) not null after gender;

Query OK, 0 rows affected (1.43 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee\_payroll;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| employee\_id | int | NO | | NULL | |

| name | varchar(150) | NO | | NULL | |

| gender | varchar(100) | YES | | NULL | |

| department | varchar(150) | NO | | NULL | |

| phone | bigint | YES | | NULL | |

| address | varchar(150) | YES | | TBD | |

| salary | int | NO | | NULL | |

| start\_date | date | NO | | NULL | |

+-------------+--------------+------+-----+---------+-------+

8 rows in set (0.07 sec)

**9)UC9**

mysql> alter table employee\_payroll add basic\_pay int not null after start\_date;

Query OK, 0 rows affected (1.60 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add deductions int not null after start\_date;

Query OK, 0 rows affected (1.74 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add taxable\_pay int not null after start\_date;

Query OK, 0 rows affected (1.58 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add income\_tax int not null after start\_date;

Query OK, 0 rows affected (1.62 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee\_payroll add net\_pay int not null after start\_date;

Query OK, 0 rows affected (1.95 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee\_payroll;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| employee\_id | int | NO | | NULL | |

| name | varchar(150) | NO | | NULL | |

| gender | varchar(100) | YES | | NULL | |

| department | varchar(150) | NO | | NULL | |

| phone | bigint | YES | | NULL | |

| address | varchar(150) | YES | | TBD | |

| salary | int | NO | | NULL | |

| start\_date | date | NO | | NULL | |

| net\_pay | int | NO | | NULL | |

| income\_tax | int | NO | | NULL | |

| taxable\_pay | int | NO | | NULL | |

| deductions | int | NO | | NULL | |

| basic\_pay | int | NO | | NULL | |

+-------------+--------------+------+-----+---------+-------+

13 rows in set (0.01 sec)