UC1-Ability to create a payroll.

```
service database
1.create database payroll_service;
2.show databases;
information_schema
| mysql
| payroll_service
| performance_schema
| sakila
| sys
| world
3.use payroll_service;
Database changed
```

UC2-Ability to create a employee payroll table

```
in the payroll service database to
manage employee payrolls.
1.create table employee_payroll
    -> (
    -> id INT NOT NULL AUTO_INCREMENT,
    -> name VARCHAR(40) NOT NULL,
    -> salary DOUBLE NOT NULL,
    -> start DATE NOT NULL,
    -> PRIMARY KEY (id)
    -> );
```

UC3. CRUD OPERATION

```
INSERT INTO employee_payroll (name, salary, start) VALUES
    -> ('Mrunal', 10000, '30-04-2021' ),
    -> ('puja', 20000, '29-04-2021');
```

UC4.For retrieve data from employee_payroll

```
SELECT * FROM employee_payroll;
+----+--------+--------+------------+
| id | name   | salary | start      |
+----+--------+--------+------------+
|  1 | Mrunal |  10000 | 2021-04-29 |
|  2 | puja   |  20000 | 2021-04-28 |
+----+--------+--------+------------+
```

U4.Ability to retrieve all the employee payroll data that is added to payroll service database.

```
 select * from employee_payroll;


+----+--------+--------+------------+
| id | name   | salary | start      |
+----+--------+--------+------------+
|  1 | Mrunal |  10000 | 2021-04-29 |
|  2 | puja   |  20000 | 2021-04-28 |
+----+--------+--------+------------+
```

uc5.Ability to retrieve salary data for a particular employee as well as all employees who have joined in a particular data range from the payroll service database.

```
select salary from employee_payroll where name='Mrunal';
+--------+
| salary |
+--------+
|  10000 |
+--------+
```

UC6.Ability to add Gender to Employee Payroll Table and Update the Rows to reflect the correct Employee Gender.

```
alter table employee_payroll add gender CHAR(1) after name;
 desc employee_payroll;
+--------+-------------+------+-----+---------+----------------+
| Field  | Type        | Null | Key | Default | Extra          |
+--------+-------------+------+-----+---------+----------------+
| id     | int         | NO   | PRI | NULL    | auto_increment |
| name   | varchar(40) | NO   |     | NULL    |                |
| gender | char(1)     | YES  |     | NULL    |                |
| salary | double      | NO   |     | NULL    |                |
| start  | date        | NO   |     | NULL    |                |
+--------+-------------+------+-----+---------+----------------+

update employee_payroll set gender = 'F' where name = 'Mrunal';
update employee_payroll set gender = 'F' where name = 'Puja';
select * from employee_payroll;
+----+--------+--------+--------+------------+
| id | name   | gender | salary | start      |
+----+--------+--------+--------+------------+
|  1 | Mrunal | F      |  10000 | 2021-04-29 |
|  2 | puja   | F      |  20000 | 2021-04-28 |
+----+--------+--------+--------+------------+
```

uc7.Ability to find sum, average, min, max and number of male and female employees.

```
SELECT AVG(salary) from employee_payroll where gender = 'F' GROUP BY
gender;

+-------------+
| AVG(salary) |
+-------------+
|       15000 |
+-------------+

select gender, COUNT(name) from employee_payroll GROUP BY gender;
+--------+-------------+
| gender | COUNT(name) |
+--------+-------------+
```

```
| F      |           2 |
+--------+-------------+

select gender, SUM(salary) from employee_payroll GROUP BY gender;
+--------+-------------+
| gender | SUM(salary) |
+--------+-------------+
| F      |       30000 |
+--------+-------------+
```

uc8.Ability to extend employee_payroll data to store employee information like employee phone, address and department.

```
show databases;
use payroll_service;
show tables;
alter table employee_payroll add phone_number varchar(40) after name;
desc employee_payroll;
alter table employee_payroll add address varchar(250) after phone_number;
alter table employee_payroll add department varchar(150) NOT NULL after
address;
alter table employee_payroll alter address set default "TBD";
desc employee_payroll;
```

uc9.Ability to extend employee_payroll table to have Basic Pay, Deductions, Taxable Pay, Income Tax, Net Pay.

```
alter table employee_payroll RENAME column salary to basic_pay;
alter table employee_payroll add deduction double NOT null after basic_pay;
alter table employee_payroll add taxable_pay double NOT null after
deduction;
alter table employee_payroll add tax double NOT null after taxable_pay;
```

UC10.Ability to make Terissa as part of Sales and Marketing Department.

```
insert into employee_payroll (name, basic_pay, department, gender, start,
deduction,taxable_pay,tax)
values
("terisa", "3000000.00", "marketing", "F", "2021-02-14", "1000000",
"2000000","500000");
```

UC11.Implement the ER Diagram into Payroll Service DB

```
create table Company (Company_id int primary key,
Company_name varchar(40)
);

create table Dept (dept_id int primary key,
dept_name varchar(40)
);

create table Employee (employee_id int primary key,
employee_name varchar(40),
```

```
phone_no bigint,
start date,
gender ENUM('F','M'),
Company_id INT,
address varchar(250),
foreign key (Company_id) references Company(Company_id)
);
desc Employee;

create table Payroll (basic_pay varchar(40),
deduction varchar(40),
taxable_pay varchar(40),
tax varchar(40),
employee_id int,
foreign key (employee_id) references Employee(employee_id)
);

create table Employee_Dpt (
employee_id int,
foreign key (employee_id) references Employee(employee_id),
dept_id int,
foreign key (dept_id) references Dept(dept_id)
);
desc Employee_Dpt;
ALTER TABLE Employee_Dpt DROP COLUMN basic_pay;
insert into  Company values (1, "infosis");
insert into  Company values (2, "HCL");
insert into  Company values (3, "TCL");
insert into  Company values (4, "wipro");
select * from Company;
insert into  Employee values (1, "shreyansh", '9876567656','2018-01-02',
'F','1','PRATAP NAGAR');
insert into  Employee values (2, "RUTVIK", '9876567655','2019-03-02',
'M','2','SHIV NAGAR');
insert into  Employee values (3, "MONI", '9876567651','2020-05-02',
'F','2','KURVE NAGAR');
insert into  Employee values (4, "HARSHA", '9576567651','2021-05-07',
'F','4','DOMBIVALI');
insert into  Employee values (5, "priyanka", '9976567651','2021-07-07',
'F','3','GANDHI NAGAR');
select * from Employee;

insert into Payroll  values (2000000, "300000", '20000','10000', '1');

insert into Dept  values (1, "computer");
insert into Dept  values (2, "civil");

insert into Employee_Dpt  values (2, "1");
```

```
select
e.employee_id,e.employee_name,e.phone_no,e.address,e.gender,d.dept_nam
e,
c.Company_name
from Company c
inner join Employee e on c.Company_id=e.Company_id
inner join Payroll p on p.employee_id = e.employee_id
inner join Employee_Dpt ed on e.employee_id = ed.employee_id
inner join Dept d on d.dept_id= ed.dept_id;
```