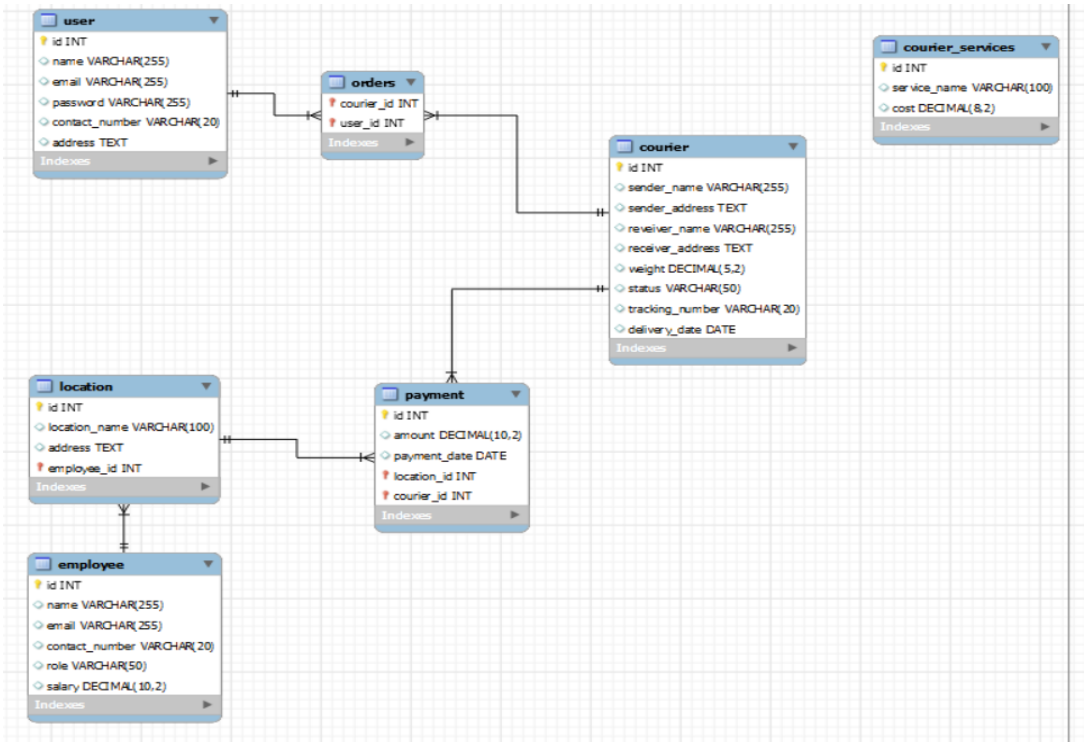
Courier Management



use courier;

-- Task 2

-- Use select and where

-- 1. List all customers:

INSERT INTO user(name, email, password, address)

VALUES

('Arial', 'ariel@underthesea.com', 'ariel01', 'Atlantica'),

('Belle', 'belle@enchantedcastle.com', 'belle01', 'France'),

('Cinderella', 'cinderella@glassslipper.com', 'cinderella01','Kingdom'),

('Jasmine', 'jasmine@agrabahpalace.com', 'jasmine01', 'Agrabah'),

('Mulan', 'mulan@chinadisguise.com', 'mulan01', 'China');

select * from user;

```
INSERT INTO courier(sender_name, sender_address, reveiver_name, receiver_address, weight, status, tracking_number, delivery_date)

VALUES

('Ariel', 'Atlantica', 'Belle', 'France', 15, 'delivered', '1234', '2024-01-31'),

('Belle', 'France', 'Cinderella', 'Kingdom', 25, 'delivered', '2334', '2024-02-27'),

('Cinderella', 'Kingdom', 'Jasmine', 'Agrabah', 13, 'undelivered', '1634', '2024-03-03'),

('Jasmine', 'Agrabah', 'Mulan', 'China', 36, 'undelivered', '3434', '2024-03-07'),

('Mulan', 'China', 'Snow White', 'Enchanted Forest', 56, 'undelivered', '1224', '2024-04-12'),

('Snow White', 'Enchanted Forest', 'Belle', 'France', 25, 'delivered', '1534', '2024-01-21');


INSERT INTO employee(id, name, email, contact_number, role, salary)

VALUES

(1, 'John Doe', 'john.doe@example.com', '123-456-7890', 'Manager', 50000.00),

(2, 'Jane Smith', 'jane.smith@example.com', '456-789-0123', 'Developer', 60000.00),

(3, 'Michael Johnson', 'michael.johnson@example.com', '789-012-3456', 'Sales Representative', 45000.00),

(4, 'Emily Davis', 'emily.davis@example.com', '012-345-6789', 'HR Specialist', 55000.00),

(5, 'David Wilson', 'david.wilson@example.com', '345-678-9012', 'Accountant', 52000.00);


-- 2. List all orders for a specific customer:


select u.name as sender, c.reveiver_name as receiver,c.status,c.delivery_date

from user u

join orders o on u.id=o.user_id join courier c on c.id=o.courier_id

where u.name='ariel';
```

```
-- 3. List all couriers:

select * from courier;

-- 4. List all packages for a specific order:

select u.name as sender, c.reveiver_name as receiver,c.status,c.delivery_date
from user u
join orders o on u.id=o.user_id join courier c on c.id=o.courier_id
where c.sender_name='arial';

-- 5. List all deliveries for a specific courier:

select *
from courier
where id=8;

-- 6. List all undelivered packages:

select *
from courier
where status='undelivered';

-- 7. List all packages that are scheduled for delivery today:

select *
from courier
where delivery_date='2024-3-3';
```

-- 8. List all packages with a specific status:

```
select *
from courier
where status='delivered';
```

-- 9. Calculate the total number of packages for each courier.

```
SELECT id, COUNT(*) AS total_packages
FROM courier
GROUP BY id;
```

-- 10. Find the average delivery time for each courier

```
SELECT id, AVG(delivery_date) AS avg_delivery_time
FROM courier
GROUP BY id;
```

-- 11. List all packages with a specific weight range:

```
select *
from courier
where weight between 10 and 30;
```

-- 12. Retrieve employees whose names contain 'John'

```
select *
from employee
where name='john';
```

-- 13. Retrieve all courier records with payments greater than $50.

```
select  c.sender_name,p.amount
from courier c join payment p on c.id=p.courier_id
where p.amount>150;

-- Task 3
-- Use GroupBy, Aggregate Functions, Having, Order By, where

-- 14. Find the total number of couriers handled by each employee.
select e.employee_name,count(e.id) as no_of_couriers
from employee e
join location l on e.id=l.employee_id
join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
group by e.id;

-- 15. Calculate the total revenue generated by each location
select l.location_name,sum(p.amount)
from location l
join payment p on l.id=p.location_id
group by l.location_name;

-- 16. Find the total number of couriers delivered to each location.
select l.location_name,count(l.id) as Total_courier
from location l
join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
group by l.location_name;
```

-- 17. Find the courier with the highest average delivery time:

```
SELECT id, AVG(delivery_date) AS avg_delivery_time
FROM courier
GROUP BY id
ORDER BY avg_delivery_time DESC
LIMIT 1;
```

-- 18. Find Locations with Total Payments Less Than a Certain Amount

```
select l.location_name,sum(p.amount) as Total_Amount
from location l join payment p on l.id=p.location_id
group by location_name
having Total_Amount<250;
```

-- 19. Calculate Total Payments per Location

```
select l.location_name,count(p.id) as Total_payments
from location l
join payment p on l.id=p.location_id
group by location_name;
```

-- 20. Retrieve couriers who have received payments totaling more than $1000 in a specific location(LocationID = X):

```
select c.sender_name,c.reveiver_name,p.amount,l.location_name
from location l
join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
where l.id=4 and p.amount>100;
```

-- 21. Retrieve couriers who have received payments totaling more than $1000 after a certain date (PaymentDate > 'YYYY-MM-DD'):

```
select c.sender_name,c.reveiver_name,p.amount,l.location_name,p.payment_date
from location l join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
where p.payment_date >'2024-2-1';

-- 22. Retrieve locations where the total amount received is more than $5000 before a certain date (PaymentDate > 'YYYY-MM-DD')
select l.location_name,p.amount,p.payment_date
from location l
join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
where p.payment_date >'2024-2-1' and p.amount>100;

-- Task-4:
-- Use Inner Join,Full Outer Join, Cross Join, Left Outer Join,Right Outer Join

-- 23. Retrieve Payments with Courier Information
select c.sender_name,p.id,p.amount,p.payment_date
from courier c
join payment p on c.id=p.courier_id;

-- 24. Retrieve Payments with Location Information
select p.id,p.amount,p.payment_date,l.location_name
from location l
join payment p on l.id=p.location_id;

-- 25. Retrieve Payments with Courier and Location Information
select c.sender_name,p.*
```

```
from courier c
join payment p on c.id=p.courier_id
join location l on p.location_id=l.id;

-- 26. List all payments with courier details
select c.sender_name,p.*
from courier c
join payment p on c.id=p.courier_id;

-- 27. Total payments received for each courier
select c.sender_name,sum(p.amount) as Total_payment
from employee e
join location l on e.id=l.employee_id
join payment p on l.id=p.location_id
join courier c on c.id=p.courier_id
group by c.sender_name;

-- 28. List payments made on a specific date
select *
from payment
where payment_date='2024-01-29';

-- 29. Get Courier Information for Each Payment
select c.sender_name,c.reveiver_name,p.amount
from courier c
join payment p on c.id=p.courier_id;

-- 30. Get Payment Details with Location
```

```
select l.location_name,p.amount,p.payment_date
from location l
join payment p on l.id=p.location_id;

-- 31. Calculating Total Payments for Each Courier
select c.id,sum(p.amount) as Total_amount
from courier c
join payment p on c.id=p.courier_id
group by p.courier_id
order by c.id ;

-- 32. List Payments Within a Date Range
select *
from payment
where payment_date between '2024-04-01' and '2024-04-04';

-- 37.List all employees and all locations, showing all possible combinations:
select *
from employee
cross join location;

-- 49. Find couriers that have a weight greater than the average weight of all couriers
select *
from courier
where weight>(select avg(weight) from courier);

-- 50. Find the names of all employees who have a salary greater than the average
salary:
```

```
select *
from employee
where salary>(select avg(salary) from employee);


-- 53. Find the locations where the maximum payment amount was made
select *
from location
where id in (select location_id
                    from payment where amount=(select max(amount)
                                                    from payment));
-- 54. Find all couriers whose weight is greater than the weight of all couriers sent by a specific sender (e.g., 'SenderName'):
select *
from courier
where weight> (select weight from courier where sender_name='ariel');
```