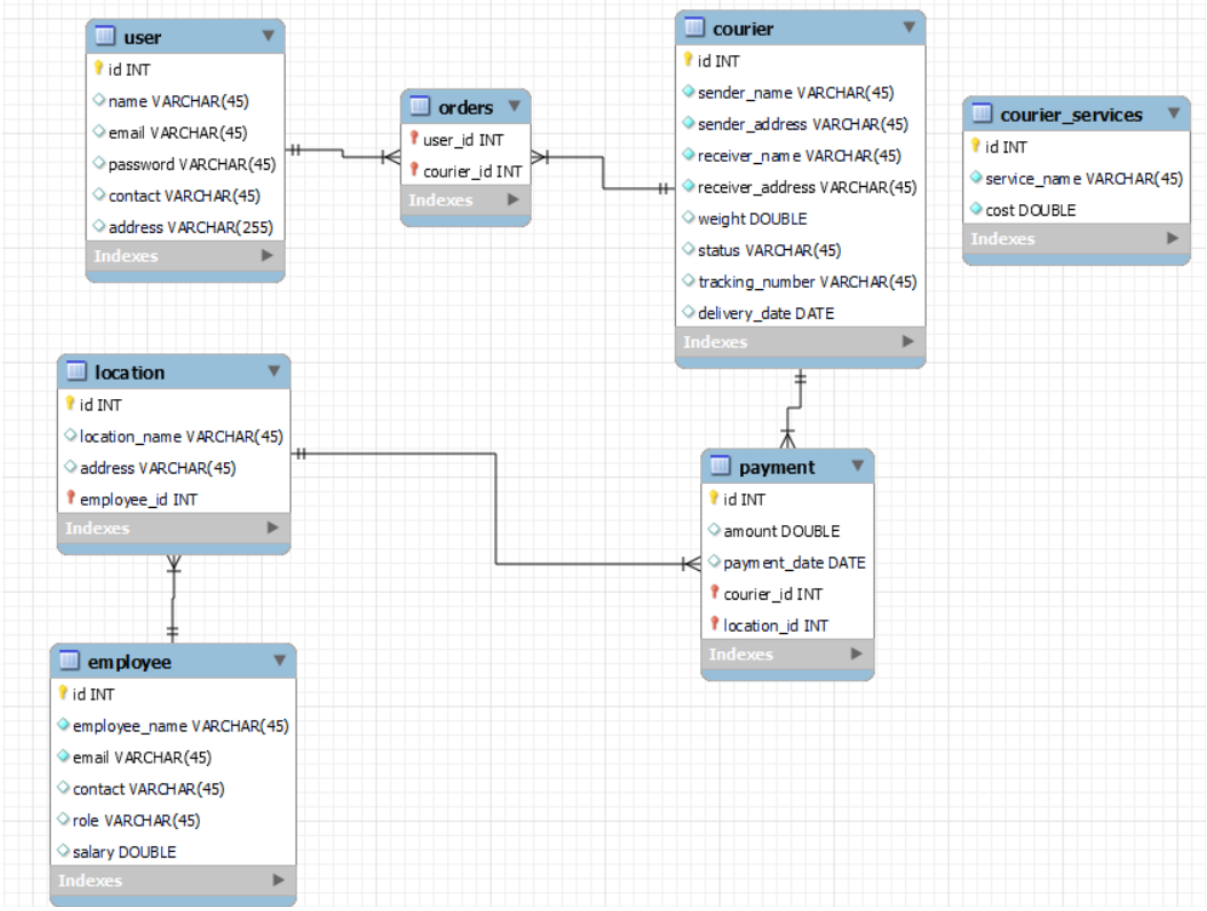
Courier Management Assignment

Task-1:



Task-2:

-- 1. List all customers:

```
select * from user;
```

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

```
select u.name as sender, c.receiver_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='luffy';

-- 3. List all couriers:
select * from courier;

-- 4. List all packages for a specific order:
select u.name as sender, c.receiver_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='luffy';

-- 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 courier_id,count(courier_id) as Total_package
from orders group by courier_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 employee_name='garp';
```

-- 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:

-- 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;
```

-- 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.receiver_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.receiver_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:

-- 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.receiver_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';
```

-- 33. Retrieve a list of all users and their corresponding courier records, including cases where there are no matches on either side

```
(select u.name,c.receiver_name
from user u left join orders o on u.id=o.user_id
left join courier c on o.courier_id=c.id)
UNION
(select u.name,c.receiver_name from user u
right join orders o on u.id=o.user_id
right join courier c on o.courier_id=c.id);
```

-- 37.List all employees and all locations, showing all possible combinations:

```
select * from
employee cross join location;
```

-- Scope: Inner Queries, Non Equi Joins, Equi joins,Exist,Any,All

-- 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='zoro');
```