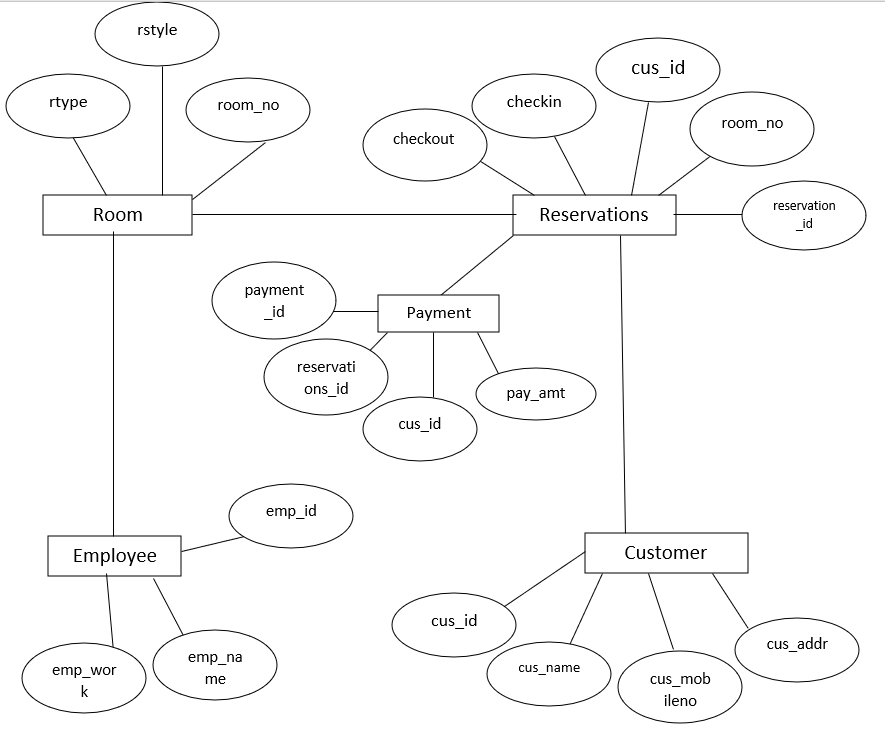
**DBMS CA2 PROJECT**

**TOPIC: HOTEL MANAGEMENT SYSTEM**

**INTRODUCTION:-**

The main objective of this project is to create a database management system of a hotel. A hotel has multiple chains for example reception, rooms, kitchen, employees, etc hence in order to function smoothly without any difficulties it needs an organized management system. Here the database contains information about customer, rooms, reservations, employees and payment. Hotel management database contains 5 entities along with thier attributes. After the creation of tables, some queries are preformed which has functions with group by, update, sorting, creating views, update and drop commands.

**ER DIAGRAM:-**

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**TABLE CREATION:-**

**1] Customer**

create table customer

(cus\_id varchar(4) constraint c\_id Primary key constraint chc\_id check (cus\_id like 'C%'),

cus\_name char(10) not null,

cus\_mobile number(10) not null,

cus\_addr char(10) not null);

insert into customer

values('C209','allen',9374648376,'panvel');

insert into customer

values('C210','ryan',9346474897,'Juinagar');

insert into customer

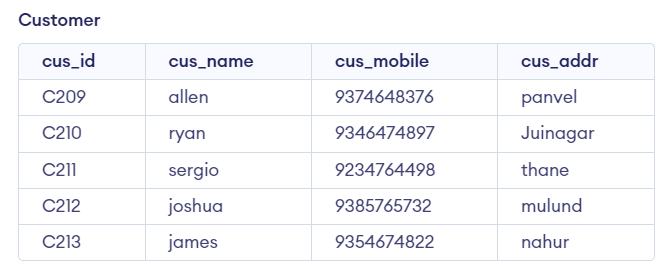
values('C211','sergio',9234764498,'thane');

insert into customer

values('C212','joshua',9385765732,'mulund');

insert into customer

values('C213','james',9354674822,'nahur');



**2] Room**

create table room

(room\_no varchar(4) constraint r\_id Primary key constraint chc\_rid check (room\_no like 'R%'),

rstyle char(10) not null,

rtype char(10) not null);

insert into room

values('R102','suite','double');

insert into room

values('R104','deluxe','single');

insert into room

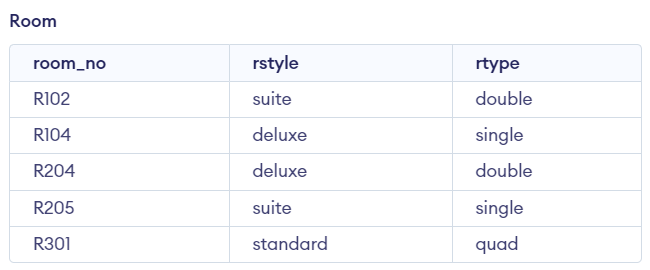
values('R204','deluxe','double');

insert into room

values('R205','suite','single');

insert into room

values('R301','standard','quad');



**3] Reservations**

create table reservations

(reservation\_id varchar(4) constraint b\_id Primary key constraint chb\_id check (reservation\_id like 'B%'),

room\_no varchar(4) constraint chk\_rid check (room\_no like'R%'),

cus\_id varchar(4) constraint chkc\_id check (cus\_id like 'C%'),

checkin date not null,

checkout date not null,

foreign key (cus\_id) references customer(cus\_id),

foreign key (room\_no) references rooms(room\_no));

insert into reservations

values('B001','R102','C209','14-july-2022','23-july-2022');

insert into reservations

values('B002','R104','C210','20-july-2022','29-july-2022');

insert into reservations

values('B003','R204','C211','17-aug-2022','30-aug-2022');

insert into reservations

values('B004','R205','C212','01-sep-2022','14-sep-2022');

insert into reservations

values('B005','R301','C213','10-sep-2022','15-sep-2022');



**4] Employee**

create table employee

(emp\_id varchar(4) constraint e\_id Primary key constraint chc\_eid check (emp\_id like 'E%'),

emp\_name char(10) not null,

emp\_work char(20) not null);

insert into employee

values('E001','jess','roomservice');

insert into employee

values('E002','alex','chef');

insert into employee

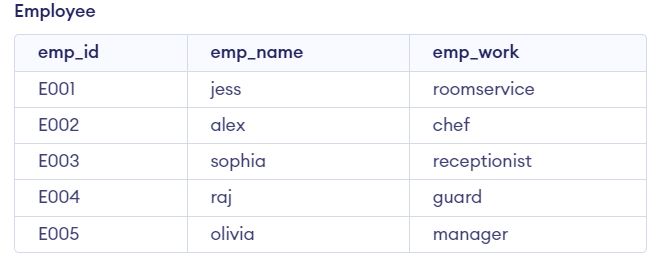
values('E003','sophia','receptionist');

insert into employee

values('E004','raj','guard');

insert into employee

values('E005','olivia','manager');



**5] Payment**

create table payment

(payment\_id varchar(4) constraint p\_id Primary key constraint chp\_id check (payment\_id like 'P%'),

reservation \_id varchar(4) constraint chk\_bid check (reservation \_id like'B%'),

cus\_id varchar(4) constraint chkc\_id check (cus\_id like 'C%'),

pay\_amt number(8,2),

foreign key (reservation\_id) references reservations(reservation\_id)

foreign key (cus\_id) references customer(cus\_id));

insert into payment

values('P121','B001','C209',4000);

insert into payment

values('P122','B002','C210',6000);

insert into payment

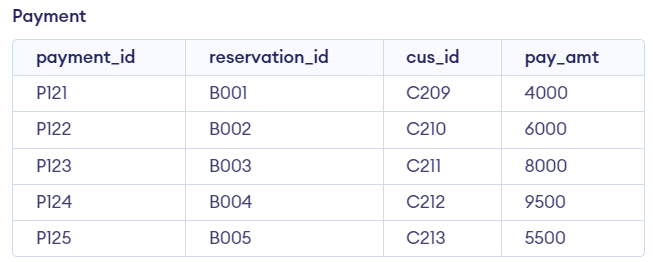
values('P123','B003','C211',8000);

insert into payment

values('P124','B004','C212',9500);

insert into payment

values('P125','B005','C213',5500);



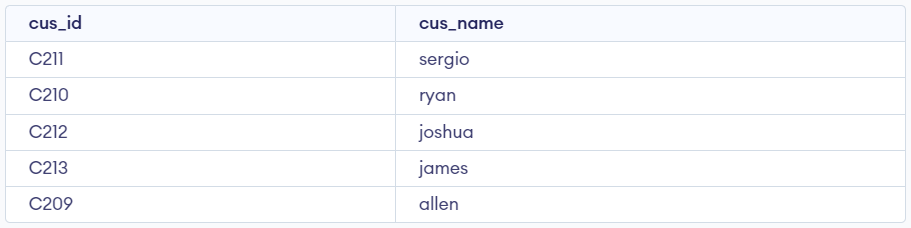
**QUERIES:-**

**1]** Display all the customer ID and Name, where all the names should be in descending order.

select cus\_id, cus\_name from customer

order by cus\_name

DESC;

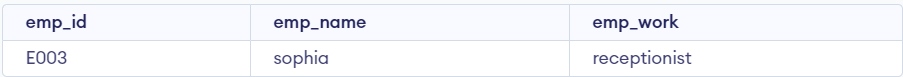


**2]** Create a view to display all the details of employees ‘sophia’ and ‘jess’.

create view sophia as

select \* from employee

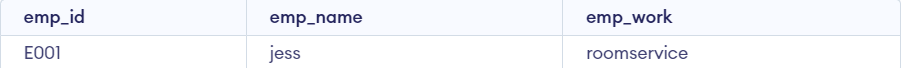
where emp\_name='sophia'



create view jess as

select \* from employee

where emp\_name='jess'



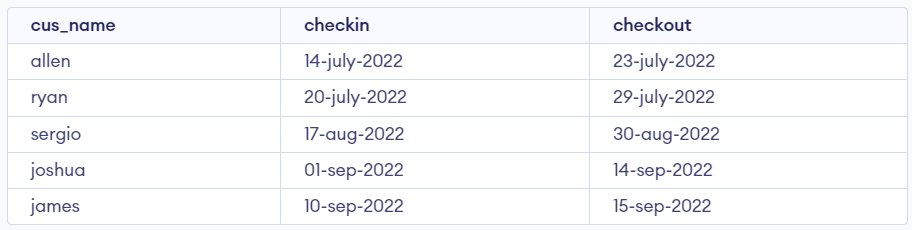
**3]** Display all the customer Name, check in date, check out date.

select cus\_name,checkin,checkout

from customer

left join reservations

on customer.cus\_id=reservations.cus\_id;



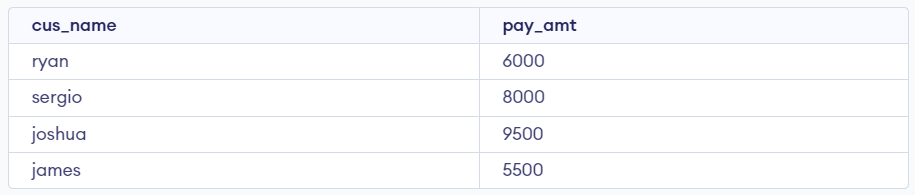
**4]** Display customer Name and payment amount who have paid more than 5000.

select cus\_name,pay\_amt

from customer,payment

where customer.cus\_id=payment.cus\_id

and pay\_amt>5000;

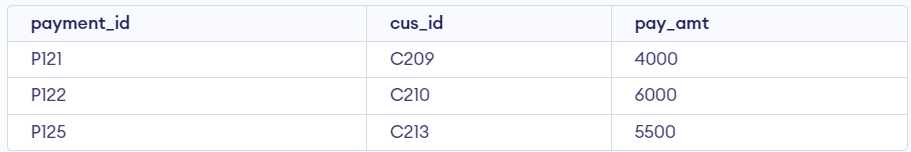


**5]** Display payment ID, customer ID, payment amount where payment amount should be less than average payment amount.

select payment\_id,cus\_id,pay\_amt

from payment

where pay\_amt<(select avg(pay\_amt)from payment);



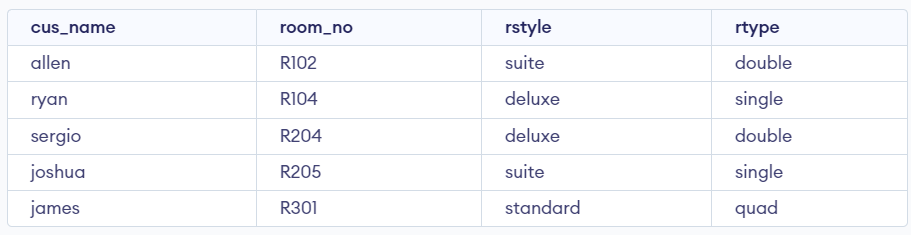
**6]** Display customer Name, room no, room style, room type.

select cus\_name,reservations.room\_no,rstyle,rtype

from customer,reservations,room

where customer.cus\_id=reservations.cus\_id

and reservations.room\_no=room.room\_no;



**7]** Update room style of room no ‘R102’.

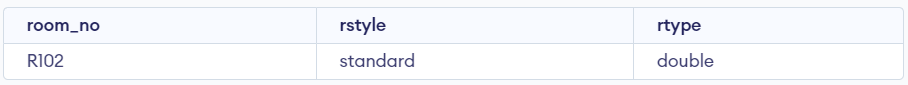
update room

set rstyle='standard'

where room\_no='R102';

select\*from room

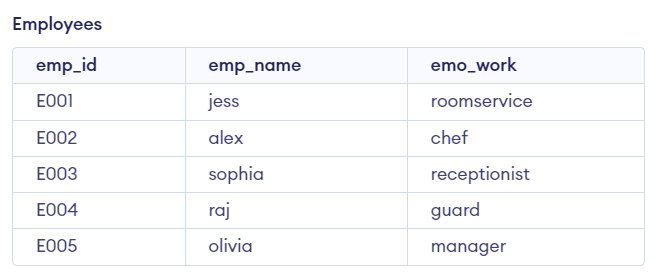
where room\_no='R102'



**8]** Rename table employee to employees

rename employee to employees;

select\*from employees;



**9]** Truncate payment table.

truncate table payment;

select \* from payment

SQL query successfully executed. However, the result set is empty.

**10]** Drop table room.

drop table room;