A Project Report On

Hotel Management System

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CERTIFICATE

This is to certify that the project entitled “Hotel Management System” is a bonafide report of the work carried out by

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Of department of Information Technology, Semester IV, under the guidance and supervision for the subject Database Management System. They were involved in project training during the academic year 2022-2023.

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1.SYSTEM OVERVIEW

One of the most important sector for the economic growth of the country is the Tourism sector, where no doubt the good facilities, good behaviour and a good management plays a major role for their attraction. Hotels, Lodges, Resorts etc. Being the important for their management during stay, should have the proper manpower and equipment to provide a better service.

"Hotel" can simply, be defined as a place where bonafide traveller can receive food, shelter, provided he/she is in a position to pay for it and is in a fit condition to be received. So, in general terms, Hotel Management System is expertise in management, professional managers, technicians, manuals, systems, etc. on the basis of management fees and share of profits as incentive payment, leading to the prosperity and profit for the hotel.

The term Hotel Management System includes the management of each and every aspect related to the hotel for attraction, smoothness of handling things, and proper management. Especially the reservation, registrations, accounts, service, payment modes, extra activities should be handled and maintained carefully and in an effective way so as to satisfy the guest as well as to check there is no leakage of profit to the hotel. The better the service, more the attraction and more the profit not only to the hotel but also indirectly to the nation.

1.3 ADVANTAGES OF THE PROPOSED SYSTEM

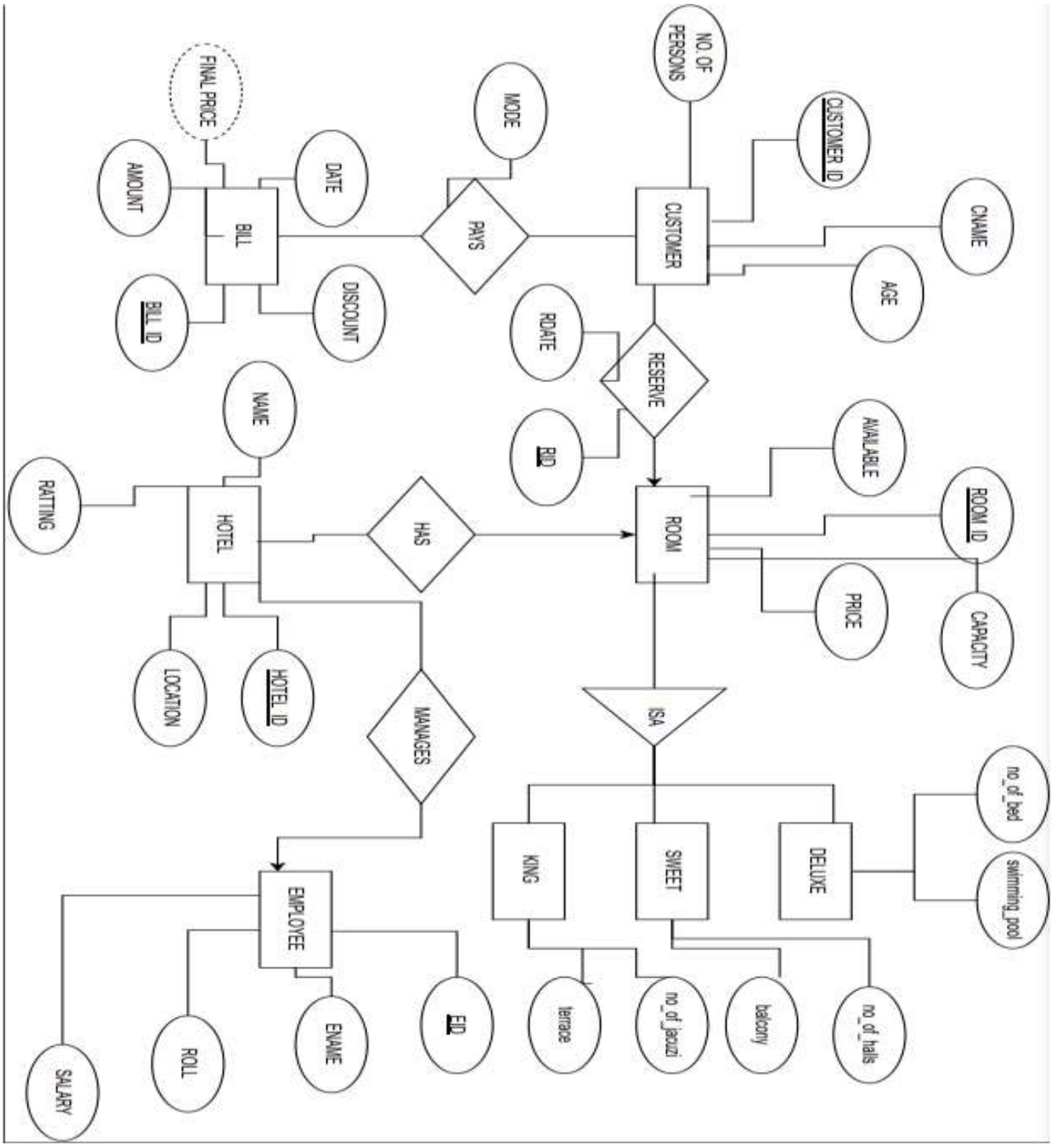
1 Opportunities – When working in a prestigious hotel, you'll face interaction with many different people and refined individuals from all over the world including celebrities, politicians, actors, musicians & so on; thus gaining many better opportunities to level up in your career.

2 Privileged life, high salary & trips to amazing places are a few of the many perks if you can get into 5-star chains such as Ritz Carlton, Marriott, Mandarin Oriental, etc.

3 Tips and Bonuses on top of salary. Some tips can go up to 20 percent or higher when excellent service is provided.

4 Hotel Management also branches out into other areas such as-

2. ENTITY-RELATIONSHIP MODEL



3. Data Dictionary

3.1 HOTEL

```
coderpad=# \d HOTEL
                    Table "public.hotel"
 Column |         Type          | Collation | Nullable | Default
--------+-----------------------+-----------+----------+---------
 hid    | integer               |           | not null |
 hname  | character varying(20) |           | not null |
 rating | numeric(3,1)          |           |          |
 city   | character varying(50) |           | not null |
 state  | character varying(50) |           | not null |
Indexes:
    "hotel_pkey" PRIMARY KEY, btree (hid)

coderpad=#
```

3.2 CUSTOMER

```
coderpad=# \d CUSTOMER
                    Table "public.customer"
    Column    |         Type          | Collation | Nullable | Default
--------------+-----------------------+-----------+----------+---------
 cid          | integer               |           | not null |
 cname        | character varying(20) |           | not null |
 age          | integer               |           | not null |
 no_of_person | integer               |           |          |
Indexes:
    "customer_pkey" PRIMARY KEY, btree (cid)

coderpad=#
```

3.3 ROOM

```
coderpad=# \d ROOM
                      Table "public.room"
  Column   |         Type         | Collation | Nullable | Default
-----------+----------------------+-----------+----------+---------
 rid       | integer              |           | not null |
 capacity  | integer              |           |          |
 available | character varying(5) |           |          |
 price     | integer              |           | not null |
 hid       | integer              |           |          |
Indexes:
    "room_pkey" PRIMARY KEY, btree (rid)
Foreign-key constraints:
    "room_hid_fkey" FOREIGN KEY (hid) REFERENCES hotel(hid)
Referenced by:
    TABLE "deluxe" CONSTRAINT "deluxe_rid_fkey" FOREIGN KEY (rid) REFEREN
CES room(rid)
    TABLE "king" CONSTRAINT "king_rid_fkey" FOREIGN KEY (rid) REFERENCES
room(rid)
    TABLE "reserve" CONSTRAINT "reserve_rid_fkey" FOREIGN KEY (rid) REFER
ENCES room(rid)
    TABLE "sweet" CONSTRAINT "sweet_rid_fkey" FOREIGN KEY (rid) REFERENCE
S room(rid)

coderpad=#
```

3.4 EMPLOYEE

```
coderpad=# \d EMPLOYEE
                    Table "public.employee"
 Column |         Type          | Collation | Nullable | Default
--------+-----------------------+-----------+----------+---------
 eid    | integer               |           | not null |
 ename  | character varying(20) |           | not null |
 role   | character varying(20) |           | not null |
 salary | integer               |           |          |
 hid    | integer               |           |          |
Indexes:
    "employee_pkey" PRIMARY KEY, btree (eid)
Foreign-key constraints:
    "employee_hid_fkey" FOREIGN KEY (hid) REFERENCES hotel(hid)

coderpad=#
```

3.5 BILL

```
coderpad=# \d BILL
                                        Table "public.bill"
  Column  |         Type          | Collation | Nullable |
      Default
----------+-----------------------+-----------+----------+---------------
---------------------------------
 bid      | integer               |           | not null |
 bdate    | date                  |           |          |
 amount   | integer               |           |          |
 discount | integer               |           |          |
 total    | numeric(30,2)         |           |          | generated alwa
ys as ((amount - discount)) stored
 mode     | character varying(15) |           |          |
 cid      | integer               |           |          |
Indexes:
    "bill_pkey" PRIMARY KEY, btree (bid)
Foreign-key constraints:
    "bill_cid_fkey" FOREIGN KEY (cid) REFERENCES customer(cid)

coderpad=#
```

3.6 DELUXE

```
coderpad=# \d DELUXE
                      Table "public.deluxe"
    Column     |         Type         | Collation | Nullable | Default
---------------+----------------------+-----------+----------+---------
 rid           | integer              |           |          |
 no_of_beds    | integer              |           |          |
 swimming_pool | character varying(5) |           |          |
Foreign-key constraints:
    "deluxe_rid_fkey" FOREIGN KEY (rid) REFERENCES room(rid)

coderpad=#
```

3.7 SWEET

```
coderpad=# \d SWEET
                      Table "public.sweet"
   Column    |         Type          | Collation | Nullable | Default
-------------+-----------------------+-----------+----------+---------
 rid         | integer               |           |          |
 no_of_halls | integer               |           |          |
 balcony     | character varying(5) |           |          |
Foreign-key constraints:
    "sweet_rid_fkey" FOREIGN KEY (rid) REFERENCES room(rid)
```

3.8 KING

```
coderpad=# \d KING
                       Table "public.king"
    Column    |         Type          | Collation | Nullable | Default
--------------+-----------------------+-----------+----------+---------
 rid          | integer               |           |          |
 no_of_jacuzi | integer               |           |          |
 terrace      | character varying(5) |           |          |
Foreign-key constraints:
    "king_rid_fkey" FOREIGN KEY (rid) REFERENCES room(rid)

coderpad=#
```

3.9 RESERVE

```
coderpad=# \d RESERVE
              Table "public.reserve"
 Column |  Type   | Collation | Nullable | Default
--------+---------+-----------+----------+---------
 rid    | integer |           |          |
 cid    | integer |           |          |
 rdate  | date    |           |          |
Foreign-key constraints:
    "reserve_cid_fkey" FOREIGN KEY (cid) REFERENCES customer(cid)
    "reserve_rid_fkey" FOREIGN KEY (rid) REFERENCES room(rid)
```

4. DATA IMPLEMENTATION

A) SCHEMA

4.1.1 HOTEL

CREATE TABLE HOTEL(hid INTEGER PRIMARY KEY, hname varchar(20) NOT NULL, rating numeric(3,1), city varchar(50) NOT NULL, state varchar(50) NOT NULL);

4.1.2 CUSTOMER

CREATE TABLE CUSTOMER (cid INTEGER PRIMARY KEY, cname varchar(20) NOT NULL, age INTEGER NOT NULL, no_of_person INTEGER);

4.1.3 ROOM

CREATE TABLE ROOM (rid INTEGER PRIMARY KEY, capacity INTEGER, available varchar(5), price INTEGER NOT NULL, hid INTEGER references HOTEL(hid));

4.1.4 EMPLOYEE

CREATE TABLE EMPLOYEE (eid INTEGER PRIMARY KEY, ename varchar(20) NOT NULL, role varchar(20) NOT NULL, salary INTEGER, hid INTEGER references HOTEL(hid));

4.1.5 BILL

CREATE TABLE BILL (bid INTEGER PRIMARY KEY, bdate date, amount INTEGER, discount INTEGER, total numeric(30,2) GENERATED ALWAYS AS (amount - discount) STORED, mode varchar(15), cid INTEGER references CUSTOMER(cid));

4.1.6 DELUXE

CREATE TABLE DELUXE (rid INTEGER references ROOM(rid), no_of_beds INTEGER, swimming_pool varchar(5));

4.1.7 SWEET

CREATE TABLE SWEET (rid INTEGER references ROOM(rid), no_of_halls INTEGER, balcony varchar(5));

4.1.8 KING

CREATE TABLE KING (rid INTEGER references ROOM(rid), no_of_jacuzi INTEGER, terrace varchar(5));

4.1.9 RESERVE

CREATE TABLE RESERVE (rid INTEGER references ROOM(rid),cid INTEGER references CUSTOMER(cid), rdate date);

B) DATA INSERTION

4.2.1 HOTEL

insert into HOTEL (hid,hname,rating,city,state) values(001,'GRAND HAYYAT GATEWAY',9.6,'MUMBAI','MAHARASTRA'),

(002,'HOTEL GRAND JYOTI',9.4,'SURAT','GUJARAT'),(003,'HOTEL GIRNAR',9.5,'JAMNAGAR','GUJARAT'),(004,'KHODIYAR DHABA',9.1,'DELHI','DELHI'),

(005,'HOTEL SKY VALLEY',8.9,'KOCHI','KERALA'),(006,'HOTEL TULSI',8.7,'NADIAD','GUJARAT'),(007,'THE GRAND BHAGVATI',9.0,'JAIPUR','RAJASTHAN'),

(008,'HOLIDAY INN',9.4,'PATAYA','THAILAND'),(009,'THE GRAND MURLIDHAR',8.8,'KUTCH','KUTCH'),(010,'HOTEL DIVYA PALACE',8.1,'KOLKATA','WEST BENGAL');

4.2.2 CUSTOMER

insert into CUSTOMER(cid,cname,age,no_of_person) values(001,'JAY BHUVA',19,2),(002,'ZEEL BODA',19,2),(003,'YASHVI CHAUHAN',19,3),

(004,'VRAJ CLERK',22,4),(005,'KEVIN SANGANI',20,1),(006,'MONIL GHORI',19,3),(007,'KRISH PATEL',18,1),(008,'JENIL SHAH',17,1),(009,'HARDIK PANDYA',25,3),

(010,'KRITI SANON',26,2),(011,'TIGER SHROFF',29,1),(012,'DIVYA PATEL',22,1),(013,'JILL DOSHI',18,1),(014,'NITYA PANJVANI',20,3),(015,'ARYAN PARIKH',19,1);

4.2.3 ROOM

insert into ROOM(rid,capacity,available,price,hid)
values(001,5,'YES',5000,002),(002,2,'YES',3000,004),(003,3,'NO',4000
,003),(004,2,'NO',3200,006),

(005,1,'NO',1300,007),(006,2,'YES',3150,008),(007,4,'YES',5600,005),(
008,5,'NO',7000,006),(009,1,'NO',1200,001),(010,2,'NO',2300,009),(0
11,4,'YES',6500,001),

(012,1,'YES',1250,007),(013,3,'NO',3450,004),(014,5,'YES',7000,010),(
015,4,'NO',6000,005);

4.2.4 EMPLOYEE

insert into EMPLOYEE(eid,ename,role,hid,salary) values(001,'RAKESH
KUMAR','MANAGER',002,12000),(002,'ABHISEKH
PATEL','WAITER',003,3500),

(003,'ANIL KUMAR','WORKER',005,2000),(004,'JASH
SHAH','ASSISTANT',006,5000),(005,'RAJ
JANI','COOK',007,4000),(006,'PREETI RAJ','HEAD CLERK',004,6000),

(007,'SAIYAD ANSARI','STAFF',001,3500),(008,'YASHRAJ
GAIKWAD','RECEPTIONIST',009,7000),(009,'UMESH
KUMAVAT','CLEANER',010,3750),(010,'RAJ
PRASAD','COOK',007,4500);

4.2.5 BILL

```
insert into BILL(bid,bdate,amount,discount,mode,cid) values
(001,'18-NOV-2020',7000,70,'online',005),(002,'20-SEP-
2022',1500,150,'online',002),(003,'22-AUG-
2021',15000,3000,'offline',001),(004,'15-FEB-
2023',5600,300,'offline',009),(005,'06-JAN-
2020',2500,125,'online',006),(006,'01-JUNE-
2021',8900,2222,'offline',003),(007,'13-MAY-2023'
,6000,2320,'offline',007),(008,'07-SEP-2020'
,7000,70,'online',008),(009,'29-OCT-
2021',6100,590,'offline',010),(010,'19-SEP-
2023',8900,2320,'online',004);
```

4.2.6 DELUXE

```
insert into DELUXE(rid,no_of_beds,swimming_pool)
values(001,3,'YES'),(002,1,'YES'),(003,2,'NO'),(011,4,'NO'),(012,2,'YES'
);
```

4.2.7 SWEET

```
insert into SWEET(rid,no_of_halls,balcony)
values(004,2,'NO'),(005,1,'NO'),(006,1,'YES'),(013,2,'NO'),(014,3,'YES'
);
```

4.2.8 KING

```
insert into KING(rid,no_of_jacuzi,terrace)
values(007,1,'YES'),(008,1,'NO'),(009,2,'YES'),(010,2,'NO'),(015,2,'YES'
);
```

4.2.9 RESERVE

```
insert into RESERVE(rid,cid,rdate) values(001,007,'21-JUNE-
2020'),(003,006,'12-MAR-2021'),(004,009,'07-DEC-
2022'),(006,003,'14-JAN-2020'),

(009,005,'23-JUL-2021'),(010,004,'17-OCT-2020'),(005,012,'11-AUG-
2022'),(007,011,'19-JAN-2020'),(002,010,'31-OCT-
2021'),(008,0014,'27-FEB-2022');
```

INSERTION OUTPUT:

4.3.1 HOTEL

```
coderpad=# SELECT * FROM HOTEL;
 hid |        hname         | rating |   city    |    state
-----+----------------------+--------+-----------+-------------
   1 | GRAND HAYYAT GATEWAY |    9.6 | MUMBAI    | MAHARASTRA
   2 | HOTEL GRAND JYOTI    |    9.4 | SURAT     | GUJARAT
   3 | HOTEL GIRNAR         |    9.5 | JAMNAGAR  | GUJARAT
   4 | KHODIYAR DHABA       |    9.1 | DELHI     | DELHI
   5 | HOTEL SKY VALLEY     |    8.9 | KOCHI     | KERALA
   6 | HOTEL TULSI          |    8.7 | NADIAD    | GUJARAT
   7 | THE GRAND BHAGVATI   |    9.0 | JAIPUR    | RAJASTHAN
   8 | HOLIDAY INN          |    9.4 | PATAYA    | THAILAND
   9 | THE GRAND MURLIDHAR  |    8.8 | KUTCH     | KUTCH
  10 | HOTEL DIVYA PALACE   |    8.1 | KOLKATA   | WEST BENGAL
(10 rows)
```

4.3.2 CUSTOMER

```
coderpad=# SELECT * FROM CUSTOMER;
 cid |     cname      | age | no_of_person
-----+----------------+-----+--------------
   1 | JAY BHUVA      |  19 |            2
   2 | ZEEL BODA      |  19 |            2
   3 | YASHVI CHAUHAN |  19 |            3
   4 | VRAJ CLERK     |  22 |            4
   5 | KEVIN SANGANI  |  20 |            1
   6 | MONIL GHORI    |  19 |            3
   7 | KRISH PATEL    |  18 |            1
   8 | JENIL SHAH     |  17 |            1
   9 | HARDIK PANDYA  |  25 |            3
  10 | KRITI SANON    |  26 |            2
  11 | TIGER SHROFF   |  29 |            1
  12 | DIVYA PATEL    |  22 |            1
  13 | JILL DOSHI     |  18 |            1
  14 | NITYA PANJVANI |  20 |            3
  15 | ARYAN PARIKH   |  19 |            1
(15 rows)
```

4.3.3 ROOM

```
coderpad=# SELECT * FROM ROOM;
 rid | capacity | available | price | hid
-----+----------+-----------+-------+-----
   1 |        5 | YES       |  5000 |   2
   2 |        2 | YES       |  3000 |   4
   3 |        3 | NO        |  4000 |   3
   4 |        2 | NO        |  3200 |   6
   5 |        1 | NO        |  1300 |   7
   6 |        2 | YES       |  3150 |   8
   7 |        4 | YES       |  5600 |   5
   8 |        5 | NO        |  7000 |   6
   9 |        1 | NO        |  1200 |   1
  10 |        2 | NO        |  2300 |   9
  11 |        4 | YES       |  6500 |   1
  12 |        1 | YES       |  1250 |   7
  13 |        3 | NO        |  3450 |   4
  14 |        5 | YES       |  7000 |  10
  15 |        4 | NO        |  6000 |   5
(15 rows)
```

4.3.4 EMPLOYEE

```
coderpad=# SELECT * FROM EMPLOYEE;
 eid |      ename      |     role     | salary | hid
-----+-----------------+--------------+--------+-----
   1 | RAKESH KUMAR    | MANAGER      |  12000 |   2
   2 | ABHISEKH PATEL  | WAITER       |   3500 |   3
   3 | ANIL KUMAR      | WORKER       |   2000 |   5
   4 | JASH SHAH       | ASSISTANT    |   5000 |   6
   5 | RAJ JANI        | COOK         |   4000 |   7
   6 | PREETI RAJ      | HEAD CLERK   |   6000 |   4
   7 | SAIYAD ANSARI   | STAFF        |   3500 |   1
   8 | YASHRAJ GAIKWAD | RECEPTIONIST |   7000 |   9
   9 | UMESH KUMAVAT   | CLEANER      |   3750 |  10
  10 | RAJ PRASAD      | COOK         |   4500 |   7
(10 rows)
```

4.3.5 BILL

```
coderpad=# SELECT * FROM BILL;
 bid |   bdate    | amount | discount |  total   |  mode   | cid
-----+------------+--------+----------+----------+---------+-----
   1 | 2020-11-18 |   7000 |       70 |  6930.00 | online  |   5
   2 | 2022-09-20 |   1500 |      150 |  1350.00 | online  |   2
   3 | 2021-08-22 |  15000 |     3000 | 12000.00 | offline |   1
   4 | 2023-02-15 |   5600 |      300 |  5300.00 | offline |   9
   5 | 2020-01-06 |   2500 |      125 |  2375.00 | online  |   6
   6 | 2021-06-01 |   8900 |     2222 |  6678.00 | offline |   3
   7 | 2023-05-13 |   6000 |     2320 |  3680.00 | offline |   7
   8 | 2020-09-07 |   7000 |       70 |  6930.00 | online  |   8
   9 | 2021-10-29 |   6100 |      590 |  5510.00 | offline |  10
  10 | 2023-09-19 |   8900 |     2320 |  6580.00 | online  |   4
(10 rows)
```

4.3.6 DELUXE

```
coderpad=# SELECT * FROM DELUXE;
 rid | no_of_beds | swimming_pool
-----+------------+---------------
   1 |          3 | YES
   2 |          1 | YES
   3 |          2 | NO
  11 |          4 | NO
  12 |          2 | YES
(5 rows)
```

4.3.7 SWEET

```
coderpad=# SELECT * FROM SWEET;
 rid | no_of_halls | balcony
-----+-------------+---------
   4 |           2 | NO
   5 |           1 | NO
   6 |           1 | YES
  13 |           2 | NO
  14 |           3 | YES
(5 rows)
```

4.3.8 KING

```
coderpad=# SELECT * FROM KING;
 rid | no_of_jacuzi | terrace
-----+--------------+---------
   7 |            1 | YES
   8 |            1 | NO
   9 |            2 | YES
  10 |            2 | NO
  15 |            2 | YES
(5 rows)
```

4.3.9 RESERVE

```
coderpad=# SELECT * FROM RESERVE;
 rid | cid |   rdate
-----+-----+------------
   1 |   7 | 2020-06-21
   3 |   6 | 2021-03-12
   4 |   9 | 2022-12-07
   6 |   3 | 2020-01-14
   9 |   5 | 2021-07-23
  10 |   4 | 2020-10-17
   5 |  12 | 2022-08-11
   7 |  11 | 2020-01-19
   2 |  10 | 2021-10-31
   8 |  14 | 2022-02-27
(10 rows)
```

4.4 QUERIES USING BASIC DBMS CONSTRUCTS
JOIN & SUBQUERIES:

4.4.1
Count the number of people who had paid the bill and their birthdate is 2020-11-18.

- select count(bid) from bill where (bdate='2020-11-18');

```
 count
-------
     1
(1 row)
```

4.4.2
Display all hotels of maharastra.

- select hname from hotel where(state='MAHARASTRA');

```
        hname
---------------------
 GRAND HAYYAT GATEWAY
(1 row)
```

4.4.3
Find the maximum salary of an employee.

- select max(salary) from employee;

```
  max
-------
 12000
(1 row)
```

4.4.4

Find the name and id of the customers who have reserved the room in hotel.

- select customer.cname,reserve.rid from reserve left join customer on reserve.cid=customer.cid;

```
     cname      | rid
----------------+-----
 KRISH PATEL    |   1
 MONIL GHORI    |   3
 HARDIK PANDYA  |   4
 YASHVI CHAUHAN |   6
 KEVIN SANGANI  |   9
 VRAJ CLERK     |  10
 DIVYA PATEL    |   5
 TIGER SHROFF   |   7
 KRITI SANON    |   2
 NITYA PANJVANI |   8
(10 rows)
```

4.4.5

Display the customer name who had reserved a room in Nadiad and the type of the room is deluxe.

- select cname from customer inner join reserve on customer.cid=reserve.cid inner join room on reserve.rid=room.rid inner join deluxe on room.rid=deluxe.rid join hotel on room.hid=hotel.hid where (city='NADIAD');

```
    cname
-------------
 KRISH PATEL
(1 row)
```

4.4.6

Find the name of all hotels whose rating is more than 9.0

- select hname from hotel where(rating>9.0);

```
        hname
---------------------
 GRAND HAYYAT GATEWAY
 HOTEL GIRNAR
 KHODIYAR DHABA
 HOLIDAY INN
 HOTEL GRAND JYOTI
(5 rows)
```

4.4.7

Display the name of hotel’s all employees whose id is 7

- select eid,ename from employee right join hotel on employee.hid=hotel.hid where (employee.hid=7);

```
 eid |     ename
-----+---------------
   7 | SAIYAD ANSARI
(1 row)
```

4.4.8

Find all customers who’s payment mode is ‘online’.

- select cname from customer where (cid in (select cid from bill where (mode='online')));

```
      cname
 ---------------
  ZEEL BODA
  VRAJ CLERK
  KEVIN SANGANI
  MONIL GHORI
  JENIL SHAH
 (5 rows)
```

4.4.9

Find the id number who have reserved the deluxe room and also selected swimming_pool.

- select cid from reserve where (rid in (select rid from deluxe where (swimming_pool='YES')));

```
 cid
-----
   7
  10
(2 rows)
```

4.4.10

Display the name of all customers, whose name starts from letter “J”.

- select cname from customer where cname like 'J%';

```
   cname
------------
 JAY BHUVA
 JENIL SHAH
 JILL DOSHI
(3 rows)
```

4.4.11

Display all details of an employee whose salary is in between 2000 to 6000.

- select * from employee where salary between 2000 and 6000;

```
 eid |     ename      |    role    | salary | hid
-----+----------------+------------+--------+-----
   2 | ABHISEKH PATEL | WAITER     |   3500 |   3
   3 | ANIL KUMAR     | WORKER     |   2000 |   5
   4 | JASH SHAH      | ASSISTANT  |   5000 |   6
   5 | RAJ JANI       | COOK       |   4000 |   7
   6 | PREETI RAJ     | HEAD CLERK |   6000 |   4
   7 | SAIYAD ANSARI  | STAFF      |   3500 |   1
   9 | UMESH KUMAVAT  | CLEANER    |   3750 |  10
  10 | RAJ PRASAD     | COOK       |   4500 |   7
(8 rows)
```

4.4.12

Display all details of reserved rooms with date in decreasing order.

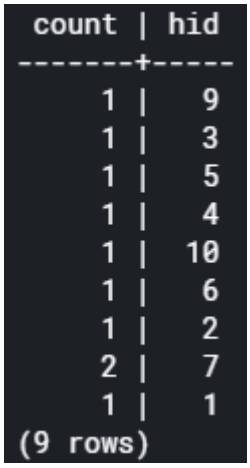
- select * from reserve order by rdate desc;

```
 rid | cid |   rdate
-----+-----+------------
   4 |   9 | 2022-12-07
   5 |  12 | 2022-08-11
   8 |  14 | 2022-02-27
   2 |  10 | 2021-10-31
   9 |   5 | 2021-07-23
   3 |   6 | 2021-03-12
  10 |   4 | 2020-10-17
   1 |   7 | 2020-06-21
   7 |  11 | 2020-01-19
   6 |   3 | 2020-01-14
(10 rows)
```

4.4.13

Display the number of employees in each hotel.

- select count(eid),hid from employee group by hid;

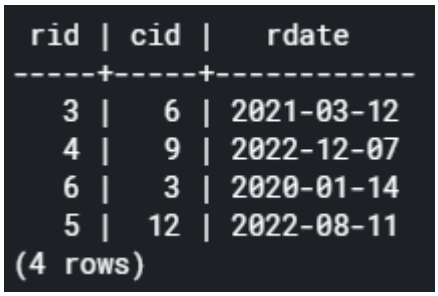


```
 count | hid
-------+-----
     1 |   9
     1 |   3
     1 |   5
     1 |   4
     1 |  10
     1 |   6
     1 |   2
     2 |   7
     1 |   1
(9 rows)
```

4.4.14

Display details of all the reservation which was done between date 5 and 15.

- select * from reserve where extract(day from rdate) between 5 and 15;



```
 rid | cid |   rdate
-----+-----+------------
   3 |   6 | 2021-03-12
   4 |   9 | 2022-12-07
   6 |   3 | 2020-01-14
   5 |  12 | 2022-08-11
(4 rows)
```