ANITI PG SERVICES

ABSTRACT

PG refers to when a person stays in someone else's house/property and pays rent for the accommodation and facilities available with it, such as electricity, water, housekeeping, and food at times.

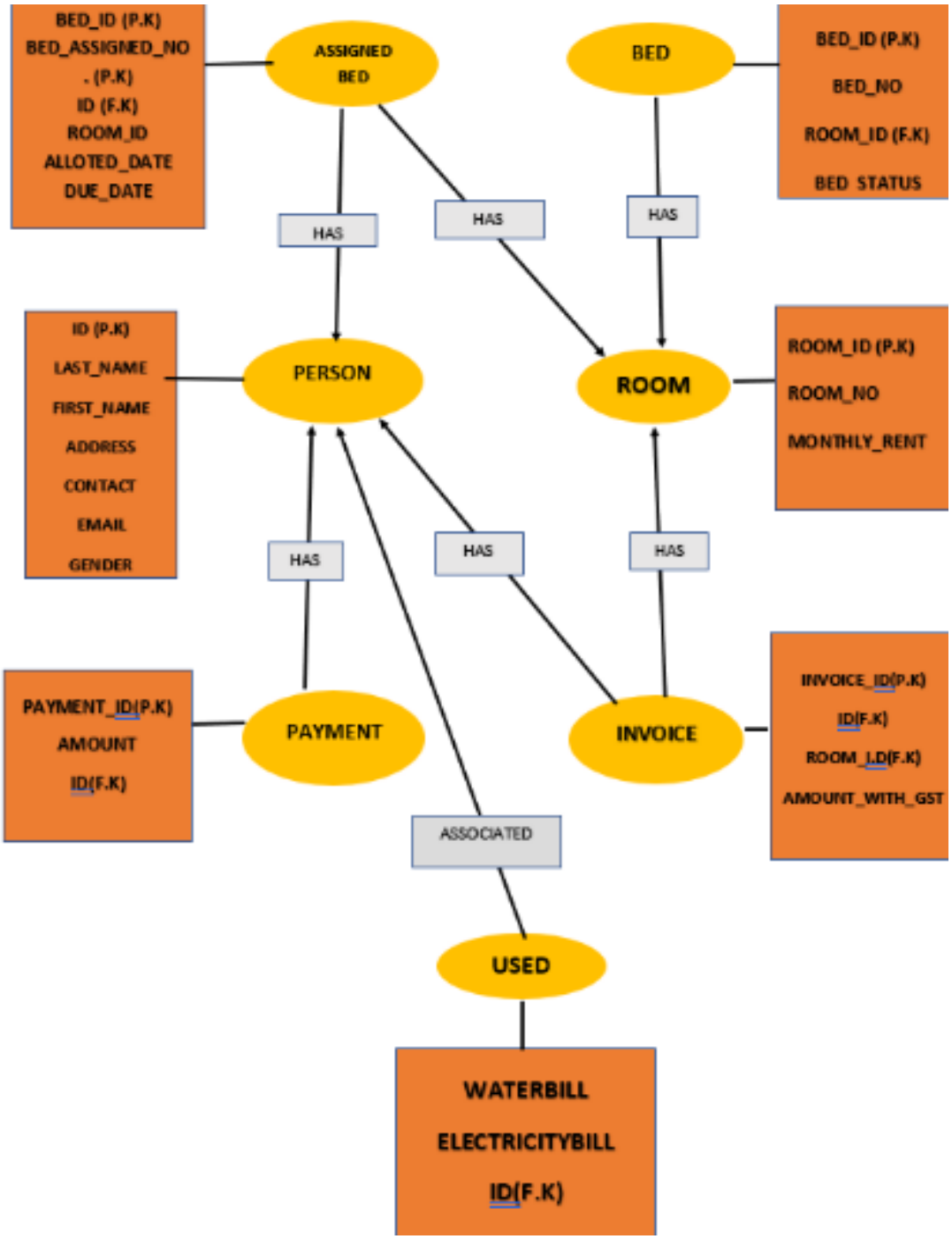
The concept of PG is generally famous in the areas closer to business centres or educational institutes because working professionals and students prefer these locations to reduce their travel time and save some money.

PG collects rent monthly, in advance at the beginning of the month. PG charges depend on the available facilities.

OBJECTIVE

- Admin control over the website.
- Online accommodation search.
- Details of room provided on a private basis.

ER DIAGRAM


BED_ID (P.K)
BED_ASSIGNED_NO
. (P.K)
ID (F.K)
ROOM_ID
ALLOTED_DATE
DUE_DATE
ASSIGNED
BED
BED
BED_ID (P.K)
BED_NO
ROOM_ID (F.K)
BED STATUS
HAS
HAS
HAS
ID (P.K)
LAST_NAME
FIRST_NAME
ADDRESS
CONTACT
EMAIL
GENDER
PERSON
ROOM
ROOM_ID (P.K)
ROOM_NO
MONTHLY_RENT
HAS
HAS
HAS
PAYMENT_ID(P.K)
AMOUNT
ID(F.K)
PAYMENT
INVOICE
INVOICE_ID(P.K)
ID(F.K)
ROOM_I.D(F.K)
AMOUNT_WITH_GST
ASSOCIATED
USED
WATERBILL
ELECTRICITYBILL
ID(F.K)

STRUCTURE OF TABLES

PERSON

This table contain all the details of a person stays pays rent for the accommodation and facilities available with it.

```
MariaDB [boarding]> desc person;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| id         | int(11)     | NO   | PRI | NULL    |       |
| last_name  | varchar(50) | YES  |     | NULL    |       |
| first_name | varchar(50) | YES  |     | NULL    |       |
| address    | varchar(50) | YES  |     | NULL    |       |
| email      | varchar(50) | YES  |     | NULL    |       |
| contact    | varchar(40) | YES  |     | NULL    |       |
| gender     | varchar(50) | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
7 rows in set (0.043 sec)
```

ROOM

This table contain information of room for person to check which room is available and their room price.

```
MariaDB [boarding]> desc room;
+--------------+---------+------+-----+---------+-------+
| Field        | Type    | Null | Key | Default | Extra |
+--------------+---------+------+-----+---------+-------+
| room_id      | int(11) | NO   | PRI | NULL    |       |
| room_no      | int(11) | YES  |     | NULL    |       |
| monthly_rent | int(11) | YES  |     | NULL    |       |
+--------------+---------+------+-----+---------+-------+
3 rows in set (0.046 sec)
```

BED

This table contain the details of person who has booked a room .

```
MariaDB [boarding]> desc bed;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| bed_id     | int(11)     | NO   | PRI | NULL    |       |
| bed_no     | int(11)     | YES  |     | NULL    |       |
| room_id    | int(11)     | YES  | MUL | NULL    |       |
| bed_status | varchar(50) | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
4 rows in set (0.045 sec)
```

USED

This table contain the details of person who has facilities available with it, such as electricity, water.

```
MariaDB [boarding]> desc used;
+-----------------+---------+------+-----+---------+-------+
| Field           | Type    | Null | Key | Default | Extra |
+-----------------+---------+------+-----+---------+-------+
| waterbill       | int(11) | YES  |     | NULL    |       |
| electricitybill | int(11) | YES  |     | NULL    |       |
| id              | int(11) | YES  | MUL | NULL    |       |
+-----------------+---------+------+-----+---------+-------+
3 rows in set (0.043 sec)
```

ASSIGNED BED

This table contain the details of person according to their assigned bed id and no with allotted and due date.

```
MariaDB [boarding]> desc assigned_bed;
+---------------+---------+------+-----+---------+-------+
| Field         | Type    | Null | Key | Default | Extra |
+---------------+---------+------+-----+---------+-------+
| bed_id        | int(11) | YES  | MUL | NULL    |       |
| bed_assign_no | int(11) | NO   | PRI | NULL    |       |
| id            | int(11) | YES  | MUL | NULL    |       |
| room_id       | int(11) | YES  | MUL | NULL    |       |
| alloted_date  | date    | YES  |     | NULL    |       |
| due_date      | date    | YES  |     | NULL    |       |
+---------------+---------+------+-----+---------+-------+
6 rows in set (0.045 sec)
```

PAYMENT

This table contain the details of payment of person who has room.

```
MariaDB [boarding]> DESC PAYMENT;
+------------+---------+------+-----+---------+-------+
| Field      | Type    | Null | Key | Default | Extra |
+------------+---------+------+-----+---------+-------+
| payment_id | int(11) | NO   | PRI | NULL    |       |
| amount     | int(11) | YES  |     | NULL    |       |
| id         | int(11) | YES  | MUL | NULL    |       |
+------------+---------+------+-----+---------+-------+
3 rows in set (0.047 sec)
```

INVOICE

This table has the information of person with their total bill.

```
MariaDB [boarding]> DESC INVOICE;
+-----------------+---------+------+-----+---------+-------+
| Field           | Type    | Null | Key | Default | Extra |
+-----------------+---------+------+-----+---------+-------+
| invoice_id      | int(11) | NO   | PRI | NULL    |       |
| id              | int(11) | YES  | MUL | NULL    |       |
| room_id         | int(11) | YES  | MUL | NULL    |       |
| amount_with_gst | int(11) | YES  |     | NULL    |       |
+-----------------+---------+------+-----+---------+-------+
4 rows in set (0.044 sec)
```

CONTENTS OF TABLES

PERSON

```
MariaDB [boarding]> select * from person;
+----+-----------+------------+------------+-------------------------+------------+--------+
| id | last_name | first_name | address    | email                   | contact    | gender |
+----+-----------+------------+------------+-------------------------+------------+--------+
|  1 | priti     | chavan     | badlapur   | abc@gmail.com           | 7863475438 | f      |
|  2 | khushi    | bhopi      | badlapur   | khushi@gmail.com        | 985746584  | f      |
|  3 | anu       | ransing    | kalyan     | ransing17@gmail.com     | 8456712579 | m      |
|  4 | pooja     | ingale     | dombivali  | pooja@gmail.com         | 8745692145 | f      |
|  5 | meenakshi | ubale      | ambernath  | min23@gmail.com         | 7584692457 | f      |
|  6 | sanskruti | vekhande   | ambernath  | sanku@gmail.com         | 7512364852 | f      |
|  7 | jay       | patil      | titwala    | jay876@gmail.com        | 8457269425 | m      |
|  8 | vivek     | bajage     | badlapur   | bajage937@gmail.com     | 7597841236 | m      |
|  9 | ashish    | dayare     | neral      | ashish97@gmail.com      | 9758426845 | m      |
| 10 | pallavi   | ransing    | vithalwadi | pallaviran@gmail.com    | 9824567185 | f      |
| 11 | aditi     | acharya    | thane      | aditi@gmail.com         | 8457216945 | f      |
| 12 | riya      | ahuja      | kalwa      | ahuja930@gmail.com      | 7584695214 | f      |
| 13 | raj       | agarwal    | thakurli   | agarwal@gmail.com       | 8457692345 | m      |
| 14 | divya     | patel      | mumbai     | divya@gmail.com         | 7541254862 | f      |
| 15 | ravi      | datta      | mumbra     | ravidat@gmail.com       | 9754824584 | m      |
| 16 | bharti    | chavan     | kalyan     | bharati09@gmail.com     | 7548754124 | f      |
| 17 | priyanka  | chavan     | ambernath  | priyanka49@gmail.com    | 8457264851 | f      |
| 18 | rohit     | chavan     | ambernath  | rohitch@gmail.com       | 9457612045 | m      |
| 19 | soham     | dhule      | badlapur   | sohamdhule@gmail.com    | 8457126458 | m      |
| 20 | ritik     | bhoir      | ulhasnagar | bhoir837@gmail.com      | 9457123684 | m      |
| 21 | amogh     | more       | kalyan     | more@gmail.com          | 9745812456 | m      |
| 22 | sima      | deshapande | kurla      | simade987@gmail.com     | 8457124569 | f      |
| 23 | prachi    | chavan     | mulund     | prachichavan93@gmail.com | 9745812457 | f      |
| 24 | minal     | ingale     | dombivali  | ingle3987@gmail.com     | 9364582736 | f      |
| 25 | vaishali  | sathe      | sangli     | sathe837@gmail.com      | 7365345367 | f      |
+----+-----------+------------+------------+-------------------------+------------+--------+
25 rows in set (0.001 sec)
```

ROOM

```
MariaDB [boarding]> select * from room;
+---------+---------+--------------+
| room_id | room_no | monthly_rent |
+---------+---------+--------------+
|       1 |    1101 |         3000 |
|       2 |    2201 |         3000 |
|       3 |    3201 |         4000 |
|       4 |    4201 |         4000 |
|       5 |    5201 |         5000 |
|       6 |    6201 |         5000 |
|       7 |    7201 |         6000 |
|       8 |    8201 |         6000 |
|       9 |    9201 |         7000 |
|      10 |    1201 |         7000 |
|      11 |    1301 |         8000 |
|      12 |    1401 |         8000 |
|      13 |    1501 |         9000 |
|      14 |    1601 |         9000 |
|      15 |    1602 |         1000 |
|      16 |    1701 |         2000 |
|      17 |    1801 |         2500 |
|      18 |    1901 |         3000 |
|      19 |    2001 |         3500 |
|      20 |    2101 |         4000 |
|      21 |    2201 |         4500 |
|      22 |    2301 |         5000 |
|      23 |    2301 |         5500 |
|      24 |    2401 |         6000 |
|      25 |    2501 |         6500 |
|      26 |    2601 |         7000 |
|      27 |    2701 |         7500 |
|      28 |    2801 |         8000 |
|      29 |    2901 |         8500 |
|      30 |    3001 |         9000 |
+---------+---------+--------------+
30 rows in set (0.001 sec)
```

BED

```
MariaDB [boarding]> select * from bed;
+--------+--------+---------+---------------+
| bed_id | bed_no | room_id | bed_status    |
+--------+--------+---------+---------------+
|   1001 |      1 |       1 | not_available |
|   1101 |     10 |      10 | not_available |
|   1201 |     11 |      11 | not_available |
|   1301 |     12 |      12 | not_available |
|   1401 |     13 |      13 | not_available |
|   1501 |     14 |      14 | not_available |
|   1601 |     15 |      15 | not_available |
|   1701 |     16 |      16 | not_available |
|   1801 |     17 |      17 | not_available |
|   1901 |     18 |      18 | not_available |
|   2001 |      2 |       2 | not_available |
|   2101 |     19 |      19 | not_available |
|   2201 |     20 |      20 | not_available |
|   2301 |     21 |      21 | not_available |
|   2401 |     22 |      22 | not_available |
|   2501 |     23 |      23 | not_available |
|   2601 |     24 |      24 | not_available |
|   2701 |     25 |      25 | not_available |
|   2801 |     26 |      26 | available     |
|   2901 |     27 |      27 | available     |
|   3001 |      3 |       3 | not_available |
|   3101 |     28 |      28 | available     |
|   3201 |     29 |      29 | available     |
|   4001 |      4 |       4 | not_available |
|   5001 |      5 |       5 | not_available |
|   6001 |      6 |       6 | not_available |
|   7001 |      7 |       7 | not_available |
|   8001 |      8 |       8 | not_available |
|   9001 |      9 |       9 | not_available |
+--------+--------+---------+---------------+
29 rows in set (0.001 sec)
```

USED

```
MariaDB [boarding]> select * from used;
+-----------+-----------------+------+
| waterbill | electricitybill | id   |
+-----------+-----------------+------+
|       500 |             900 |    1 |
|       600 |            1000 |    2 |
|       800 |             600 |    3 |
|       900 |             700 |    4 |
|       600 |             300 |    5 |
|       200 |             800 |    6 |
|       900 |             200 |    7 |
|       700 |             800 |    9 |
|       400 |             600 |   10 |
|       900 |             400 |   11 |
|      1000 |             800 |   12 |
|       800 |             600 |   13 |
|       900 |             900 |   14 |
|       600 |            1000 |   15 |
|       300 |             800 |   16 |
|       500 |             800 |   17 |
|       900 |             500 |   18 |
|       400 |             700 |   19 |
|       900 |            1200 |   20 |
|      1000 |            1700 |   21 |
|       800 |            1600 |   22 |
|       500 |            1100 |   23 |
|       300 |            1000 |   24 |
|       800 |             800 |   25 |
+-----------+-----------------+------+
24 rows in set (0.039 sec)
```

ASSIGNED BED

```
MariaDB [boarding]> select * from assigned_bed;
+--------+---------------+------+---------+--------------+------------+
| bed_id | bed_assign_no | id   | room_id | alloted_date | due_date   |
+--------+---------------+------+---------+--------------+------------+
|   1001 |             1 |    1 |       1 | 2019-08-17   | 2019-12-20 |
|   1101 |             2 |    2 |       2 | 2019-05-18   | 2019-12-08 |
|   1201 |             3 |    3 |       3 | 2019-06-18   | 2019-12-23 |
|   1301 |             4 |    4 |       4 | 2019-04-10   | 2019-12-29 |
|   1401 |             5 |    5 |       5 | 2019-03-02   | 2019-12-05 |
|   1501 |             6 |    6 |       6 | 2020-02-07   | 2020-12-19 |
|   1601 |             7 |    7 |       7 | 2020-01-21   | 2020-12-12 |
|   1701 |             8 |    8 |       8 | 2020-04-12   | 2020-12-10 |
|   1801 |             9 |    9 |       9 | 2020-02-09   | 2020-12-21 |
|   1901 |            10 |   10 |      10 | 2020-01-01   | 2020-12-26 |
|   2001 |            11 |   11 |      11 | 2020-05-06   | 2020-12-04 |
|   2101 |            12 |   12 |      12 | 2021-03-08   | 2021-12-31 |
|   2201 |            13 |   13 |      13 | 2021-03-16   | 2021-12-26 |
|   2301 |            14 |   14 |      14 | 2021-01-02   | 2021-12-04 |
|   2401 |            15 |   15 |      15 | 2021-01-04   | 2021-12-07 |
|   2501 |            16 |   16 |      16 | 2021-02-06   | 2021-12-12 |
|   2601 |            17 |   17 |      17 | 2021-06-01   | 2021-12-02 |
|   2701 |            18 |   18 |      18 | 2021-11-28   | 2021-12-19 |
|   2801 |            19 |   19 |      19 | 2021-05-30   | 2021-12-20 |
|   2901 |            20 |   20 |      20 | 2021-02-19   | 2021-12-03 |
|   3001 |            21 |   21 |      21 | 2021-08-20   | 2021-12-09 |
|   3101 |            22 |   22 |      22 | 2021-02-19   | 2021-12-29 |
|   3201 |            23 |   23 |      23 | 2022-09-23   | 2022-12-13 |
|   4001 |            24 |   24 |      24 | 2022-10-05   | 2022-12-28 |
|   5001 |            25 |   25 |      25 | 2022-02-11   | 2022-12-02 |
+--------+---------------+------+---------+--------------+------------+
25 rows in set (0.041 sec)
```

PAYMENT

```
MariaDB [boarding]> select * from payment;
+------------+--------+------+
| payment_id | amount | id   |
+------------+--------+------+
|        501 |   9000 |    1 |
|        502 |   2100 |    2 |
|        503 |   1800 |    3 |
|        504 |   2400 |    4 |
|        505 |   2700 |    5 |
|        506 |  30000 |    6 |
|        507 |   3300 |    7 |
|        508 |   2400 |    8 |
|        509 |   3300 |    9 |
|        510 |   3600 |   10 |
|        511 |  33000 |   11 |
|        512 |  33000 |   12 |
|        513 |  24000 |   13 |
|        514 |  36000 |   14 |
|        515 |  36000 |   15 |
|        516 |  33000 |   16 |
|        517 |  18000 |   17 |
|        518 |   3000 |   18 |
|        519 |  21000 |   19 |
|        520 |  33000 |   20 |
|        521 |  12000 |   21 |
|        522 |  33000 |   22 |
+------------+--------+------+
22 rows in set (0.001 sec)
```

INVOICE

```
MariaDB [boarding]> select * from invoice;
+------------+------+---------+-----------------+
| invoice_id | id   | room_id | amount_with_gst |
+------------+------+---------+-----------------+
|          1 |    1 |       1 |           15000 |
|          2 |    2 |       2 |           30000 |
|          3 |    3 |       3 |           25000 |
|          4 |    4 |       4 |           34000 |
|          5 |    5 |       5 |           38000 |
|          6 |    6 |       6 |           45000 |
|          7 |    7 |       7 |           45000 |
|          8 |    8 |       8 |           43000 |
|          9 |    9 |       9 |           45000 |
|         10 |   10 |      10 |           44000 |
|         11 |   11 |      11 |           40000 |
|         12 |   12 |      12 |           44000 |
|         13 |   13 |      13 |           30000 |
|         14 |   14 |      14 |           40000 |
|         15 |   15 |      15 |           40000 |
|         16 |   16 |      16 |           40000 |
|         17 |   17 |      17 |           24000 |
|         18 |   18 |      18 |           35000 |
|         19 |   19 |      19 |           28000 |
|         20 |   20 |      20 |           40000 |
|         21 |   21 |      21 |           18000 |
|         22 |   22 |      22 |           40000 |
+------------+------+---------+-----------------+
22 rows in set (0.001 sec)
```

SUBQUERY

1. Show the information of person who has amount with gst is in between 3000 and 8000.

MariaDB [boarding]> select id,last_name,first_name,contact from person where id in (select id from invoice where amount_with_gst between 30000

and 40000);

```
MariaDB [boarding]> select id,last_name,first_name,contact from person where id in (select id from invoice where amount_with_gst between 30000 and 40000);
+----+-----------+------------+------------+
| id | last_name | first_name | contact    |
+----+-----------+------------+------------+
|  2 | khushi    | bhopi      | 985746584  |
|  4 | pooja     | ingale     | 8745692145 |
|  5 | meenakshi | ubale      | 7584692457 |
| 11 | aditi     | acharya    | 8457216945 |
| 13 | raj       | agarwal    | 8457692345 |
| 14 | divya     | patel      | 7541254862 |
| 15 | ravi      | datta      | 9754824584 |
| 16 | bharti    | chavan     | 7548754124 |
| 18 | rohit     | chavan     | 9457612045 |
| 20 | ritik     | bhoir      | 9457123684 |
| 22 | sima      | deshapande | 8457124569 |
+----+-----------+------------+------------+
11 rows in set (0.003 sec)
```

2. Display the information of bed who is not available.

MariaDB [boarding]> select bed_assign_no,room_id from assigned_bed where bed_id in (select bed_id from bed where bed_status='not_available');

```
MariaDB [boarding]> select bed_assign_no,room_id from assigned_bed where bed_id in (select bed_id from bed where bed_status='not_available');
+---------------+---------+
| bed_assign_no | room_id |
+---------------+---------+
|             1 |       1 |
|             2 |       2 |
|             3 |       3 |
|             4 |       4 |
|             5 |       5 |
|             6 |       6 |
|             7 |       7 |
|             8 |       8 |
|             9 |       9 |
|            10 |      10 |
|            11 |      11 |
|            12 |      12 |
|            13 |      13 |
|            14 |      14 |
|            15 |      15 |
|            16 |      16 |
|            17 |      17 |
|            18 |      18 |
|            21 |      21 |
|            24 |      24 |
|            25 |      25 |
+---------------+---------+
21 rows in set (0.001 sec)
```

3. Show the information of payment of person which is greater than amount with gst 33000 or 40000.

MariaDB [boarding]> select payment_id,id,amount from payment where id > any(select id from invoice where amount_with_gst in(33000,40000));

```
MariaDB [boarding]> select payment_id,id,amount from payment where id > any(select id from invoice where amount_with_gst in(33000,40000));
+------------+------+--------+
| payment_id | id   | amount |
+------------+------+--------+
|        512 |   12 |  33000 |
|        513 |   13 |  24000 |
|        514 |   14 |  36000 |
|        515 |   15 |  36000 |
|        516 |   16 |  33000 |
|        517 |   17 |  18000 |
|        518 |   18 |   3000 |
|        519 |   19 |  21000 |
|        520 |   20 |  33000 |
|        521 |   21 |  12000 |
|        522 |   22 |  33000 |
+------------+------+--------+
11 rows in set (0.001 sec)
```

4. Show the information of person's invoice who has room id is 1 or 7 or 20.

MariaDB [boarding]> select invoice_id,amount_with_gst,room_id from invoice where id in (select id from payment where room_id in(1,7,20));

```
MariaDB [boarding]> select invoice_id,amount_with_gst,room_id from invoice where id in (select id from payment where room_id in(1,7,20));
+------------+----------------+---------+
| invoice_id | amount_with_gst | room_id |
+------------+----------------+---------+
|          1 |          15000 |       1 |
|          7 |          45000 |       7 |
|         20 |          40000 |      20 |
+------------+----------------+---------+
3 rows in set (0.001 sec)
```

View

create a view for payment id ,amount ,invoive id ,amount with gst associated with id of person.

MariaDB [boarding]> create view person_info as select payment.payment_id,payment.amount,invoice.id,invoice.amount_with_gs

from payment,invoice where payment.id=invoice.id;

```
MariaDB [boarding]> select * from person_info;
+------------+--------+------+-----------------+
| payment_id | amount | id   | amount_with_gst |
+------------+--------+------+-----------------+
|        501 |   9000 |    1 |           15000 |
|        502 |   2100 |    2 |           30000 |
|        503 |   1800 |    3 |           25000 |
|        504 |   2400 |    4 |           34000 |
|        505 |   2700 |    5 |           38000 |
|        506 |  30000 |    6 |           45000 |
|        507 |   3300 |    7 |           45000 |
|        508 |   2400 |    8 |           43000 |
|        509 |   3300 |    9 |           45000 |
|        510 |   3600 |   10 |           44000 |
|        511 |  33000 |   11 |           40000 |
|        512 |  33000 |   12 |           44000 |
|        513 |  24000 |   13 |           30000 |
|        514 |  36000 |   14 |           40000 |
|        515 |  36000 |   15 |           40000 |
|        516 |  33000 |   16 |           40000 |
|        517 |  18000 |   17 |           24000 |
|        518 |   3000 |   18 |           35000 |
|        519 |  21000 |   19 |           28000 |
|        520 |  33000 |   20 |           40000 |
|        521 |  12000 |   21 |           18000 |
|        522 |  33000 |   22 |           40000 |
+------------+--------+------+-----------------+
22 rows in set (0.039 sec)
```

JOINS

1.display invoice information and person’s only room rent which is amount information associated with id of person and also matching rows for the table on the right side of join which is payment.

MariaDB [boarding]> select invoice.invoice_id,invoice.amount_with_gst,payment.amount from invoice left join payment on invoice.id=payment.id;

```
MariaDB [boarding]> select invoice.invoice_id,invoice.amount_with_gst,payment.amount from invoice left join payment on invoice.id=payment.id;
+------------+-----------------+--------+
| invoice_id | amount_with_gst | amount |
+------------+-----------------+--------+
|          1 |           15000 |   9000 |
|          2 |           30000 |   2100 |
|          3 |           25000 |   1800 |
|          4 |           34000 |   2400 |
|          5 |           38000 |   2700 |
|          6 |           45000 |  30000 |
|          7 |           45000 |   3300 |
|          8 |           43000 |   2400 |
|          9 |           45000 |   3300 |
|         10 |           44000 |   3600 |
|         11 |           40000 |  33000 |
|         12 |           44000 |  33000 |
|         13 |           30000 |  24000 |
|         14 |           40000 |  36000 |
|         15 |           40000 |  36000 |
|         16 |           40000 |  33000 |
|         17 |           24000 |  18000 |
|         18 |           35000 |   3000 |
|         19 |           28000 |  21000 |
|         20 |           40000 |  33000 |
|         21 |           18000 |  12000 |
|         22 |           40000 |  33000 |
+------------+-----------------+--------+
22 rows in set (0.001 sec)
```

2.create a inner join to display invoice information and room information according to person id.

MariaDB [boarding]> select invoice.invoice_id,invoice.amount_with_gst,room.room_no,room.monthly_rent from invoice inner join room on invoice.room_id=room.room_id;

```
MariaDB [boarding]> select invoice.invoice_id,invoice.amount_with_gst,room.room_no,room.monthly_rent from invoice inner join room on invoice.room_id=room.room_id;
+------------+-----------------+---------+--------------+
| invoice_id | amount_with_gst | room_no | monthly_rent |
+------------+-----------------+---------+--------------+
|          1 |           15000 |    1101 |         3000 |
|          2 |           30000 |    2201 |         3000 |
|          3 |           25000 |    3201 |         4000 |
|          4 |           34000 |    4201 |         4000 |
|          5 |           38000 |    5201 |         5000 |
|          6 |           45000 |    6201 |         5000 |
|          7 |           45000 |    7201 |         6000 |
|          8 |           43000 |    8201 |         6000 |
|          9 |           45000 |    9201 |         7000 |
|         10 |           44000 |    1201 |         7000 |
|         11 |           40000 |    1301 |         8000 |
|         12 |           44000 |    1401 |         8000 |
|         13 |           30000 |    1501 |         9000 |
|         14 |           40000 |    1601 |         9000 |
|         15 |           40000 |    1602 |         1000 |
|         16 |           40000 |    1701 |         2000 |
|         17 |           24000 |    1801 |         2500 |
|         18 |           35000 |    1901 |         3000 |
|         19 |           28000 |    2001 |         3500 |
|         20 |           40000 |    2101 |         4000 |
|         21 |           18000 |    2201 |         4500 |
|         22 |           40000 |    2301 |         5000 |
+------------+-----------------+---------+--------------+
22 rows in set (0.001 sec)
```

3.display bed information using right join has same room id.

MariaDB [boarding]> select assigned_bed.bed_assign_no,assigned_bed.alloted_date,bed.bed_no,bed.bed_status from assigned_bed right join bed on assigned_bed.room_id=bed.room_id;

```
MariaDB [boarding]> select assigned_bed.bed_assign_no,assigned_bed.alloted_date,bed.bed_no,bed.bed_status from assigned_bed right join bed on assigned_bed.room_id=bed.room_id;
+---------------+--------------+--------+--------------+
| bed_assign_no | alloted_date | bed_no | bed_status   |
+---------------+--------------+--------+--------------+
|             1 | 2019-08-17   |      1 | not_available |
|            10 | 2020-01-01   |     10 | not_available |
|            11 | 2020-05-06   |     11 | not_available |
|            12 | 2021-03-08   |     12 | not_available |
|            13 | 2021-03-16   |     13 | not_available |
|            14 | 2021-01-02   |     14 | not_available |
|            15 | 2021-01-04   |     15 | not_available |
|            16 | 2021-02-06   |     16 | not_available |
|            17 | 2021-06-01   |     17 | not_available |
|            18 | 2021-11-28   |     18 | not_available |
|             2 | 2019-05-18   |      2 | not_available |
|            19 | 2021-05-30   |     19 | not_available |
|            20 | 2021-02-19   |     20 | not_available |
|            21 | 2021-08-20   |     21 | not_available |
|            22 | 2021-02-19   |     22 | not_available |
|            23 | 2022-09-23   |     23 | not_available |
|            24 | 2022-10-05   |     24 | not_available |
|            25 | 2022-02-11   |     25 | not_available |
|          NULL | NULL         |     26 | available     |
|          NULL | NULL         |     27 | available     |
|             3 | 2019-06-18   |      3 | not_available |
|          NULL | NULL         |     28 | available     |
|          NULL | NULL         |     29 | available     |
|             4 | 2019-04-10   |      4 | not_available |
|             5 | 2019-03-02   |      5 | not_available |
|             6 | 2020-02-07   |      6 | not_available |
|             7 | 2020-01-21   |      7 | not_available |
|             8 | 2020-04-12   |      8 | not_available |
|             9 | 2020-02-09   |      9 | not_available |
+---------------+--------------+--------+--------------+
29 rows in set (0.001 sec)
```

4.show the bed availability using self join.

MariaDB [boarding]> select s1.bed_id as bed, s2.bed_status as availability_of_bed from bed s1 join bed s2 on s1.bed_no=s2.room_id;

```
MariaDB [boarding]> select s1.bed_id as bed, s2.bed_status as availability_of_bed from bed s1 join bed s2 on s1.bed_no=s2.room_id;
+------+---------------------+
| bed  | availability_of_bed |
+------+---------------------+
| 1001 | not_available       |
| 1101 | not_available       |
| 1201 | not_available       |
| 1301 | not_available       |
| 1401 | not_available       |
| 1501 | not_available       |
| 1601 | not_available       |
| 1701 | not_available       |
| 1801 | not_available       |
| 1901 | not_available       |
| 2001 | not_available       |
| 2101 | not_available       |
| 2201 | not_available       |
| 2301 | not_available       |
| 2401 | not_available       |
| 2501 | not_available       |
| 2601 | not_available       |
| 2701 | not_available       |
| 2801 | available           |
| 2901 | available           |
| 3001 | not_available       |
| 3101 | available           |
| 3201 | available           |
| 4001 | not_available       |
| 5001 | not_available       |
| 6001 | not_available       |
| 7001 | not_available       |
| 8001 | not_available       |
| 9001 | not_available       |
+------+---------------------+
29 rows in set (0.001 sec)
```