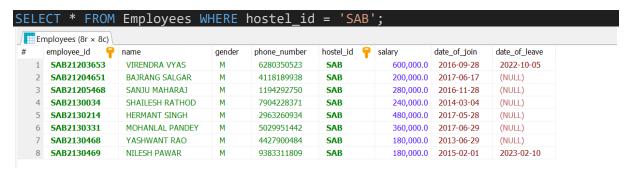
**Name:** Krish Bharat Porwal

**Registration Number:** 231080910

#### **Questions**=

1. Get all the employees of a specific hostel.



2. Get the total number of rooms in each hostel.

```
SELECT hostel_id, COUNT(*) AS total_rooms

FROM Rooms

GROUP BY hostel_id;

Rooms (1r × 2c)

# hostel_id  total_rooms

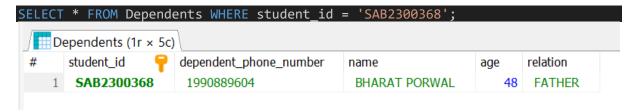
1 SAB 37
```

3. Find out which rooms are currently occupied by students in a specific hostel.

```
SELECT r.*
FROM Rooms r
INNER JOIN Student_room_assignment sra ON r.room_number = sra.room_number AND
r.hostel_id = sra.hostel_id
WHERE r.hostel_id = 'SAB';
```

Rooms (113r × 3c)					
#	room_number 🥊	capacity	hostel_id 🥊		
1	3	3	SAB		
2	3	3	SAB		
3	3	3	SAB		
4	4	4	SAB		
5	4	4	SAB		
6	4	4	SAB		
7	4	4	SAB		
8	5	3	SAB		
9	5	3	SAB		
10	6	4	SAB		
11	6	4	SAB		
12	6	4	SAB		
13	6	4	SAB		

4. List all the dependents of a specific student.



5. Get the total fees paid by a specific student.

6. Find out the mode of payment used by each student for their fees.

7. Get the number of students in each hostel.

```
SELECT hostel_id, COUNT(*) AS total_students

FROM Students

GROUP BY hostel_id;

Students (1r × 2c)

# hostel_id  total_students

1 SAB 113
```

8. Find the average age of students in a specific hostel.

```
SELECT AVG(age) AS average_age

FROM Students

WHERE hostel_id = 'SAB';

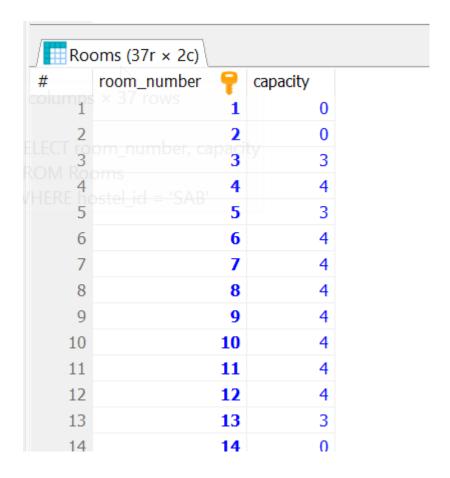
Students (1r × 1c)

# average_age

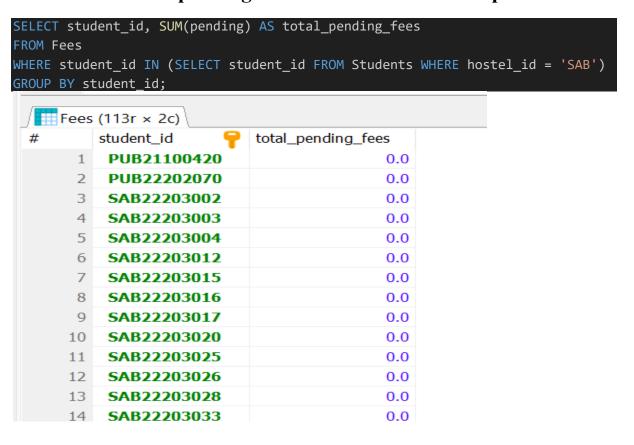
1 19.5044
```

9. List all the rooms with their capacities in a specific hostel.

```
SELECT room_number, capacity
FROM Rooms
WHERE hostel_id = 'SAB';
```



#### 10. Get the total pending fees for each student in a specific hostel.



#### 11. Find the highest-paid employee in each hostel.

```
SELECT hostel_id, MAX(salary) AS highest_salary

FROM Employees

GROUP BY hostel_id;

Employees (1r × 2c)

# hostel_id  highest_salary

1 SAB 600,000.0
```

#### 12. List all the students who have not paid their fees in full.

```
SELECT student_id

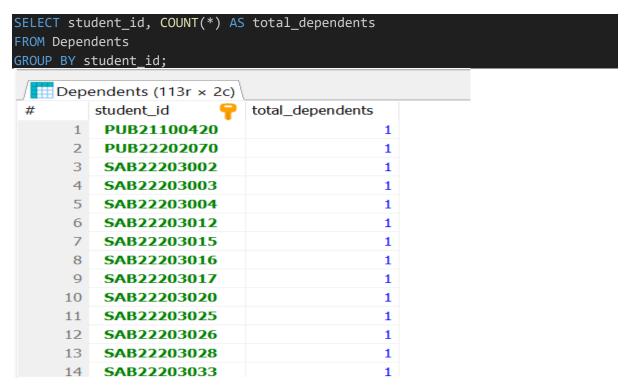
FROM Fees
WHERE pending > 0;

Fees (Or × 1c)

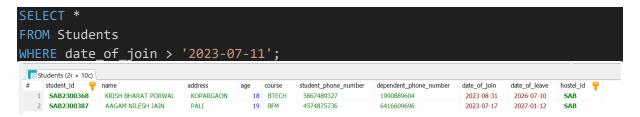
# student_id 

| Student_id | |
```

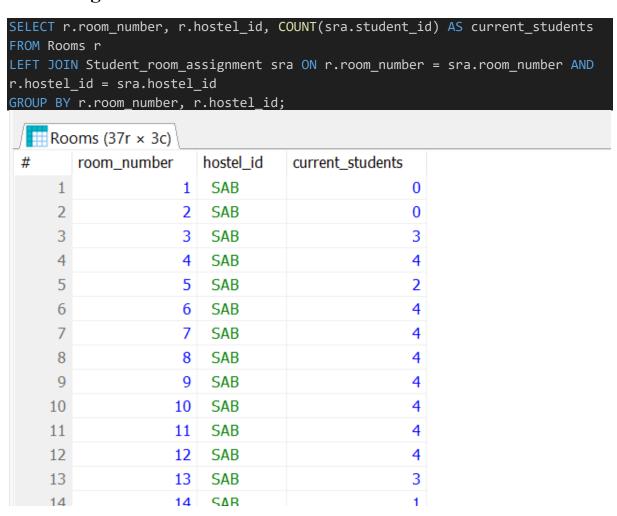
#### 13. Find the total number of dependents for each student.



14. Get the details of students who joined after a specific date.



15. List all the rooms with the number of students currently assigned to them.



16. Find the average salary of employees in each hostel.

```
SELECT hostel_id, AVG(salary) AS average_salary
FROM Employees
```

```
# hostel_id average_salary

SAB 315,000.0
```

17. Get the total number of dependents of age 69.

```
SELECT COUNT(*) AS total_dependents
FROM Dependents d
JOIN Students s ON d.student_id = s.student_id
WHERE d.age = 69;

Dependents (1r × 1c)

# total_dependents
1 0
```

18. Find out the total amount of fees collected each month.

19. List all the students who have pending fees greater than a specific amount.

```
SELECT MONTH(date) AS month, YEAR(date) AS year, SUM(amount) AS total_fees_collected FROM Fees
GROUP BY MONTH(date), YEAR(date);
```

Fees (2r × 3c)					
#	month	year	total_fees_collected		
1	1	2,024	6,560,000		
2	12	2,023	2,480,000		

20. Find the oldest and youngest student in each hostel.

```
SELECT hostel_id, MIN(age) AS youngest_student_age, MAX(age) AS oldest_student_age
FROM Students
GROUP BY hostel_id;

Students (1r × 3c)

# hostel_id youngest_student_age oldest_student_age
1 SAB 16 27
```

21. List all the employees who have joined in the last six months.



22. Find the total number of rooms and total capacity in each hostel.

## 23. Get the names and ages of all students along with their respective hostels.

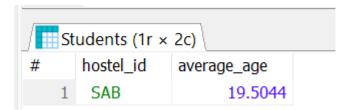
```
SELECT s.name AS student_name, s.age, h.name AS hostel_name
FROM Students s
JOIN Hostel Branch h ON s.hostel id = h.hostel id;
 Students (113r × 3c)
         student name
                                                hostel_name
                                         age
      1 YASH VIJAY KHATOR
                                                SMJV Sandhurst Road
      2 DAKSH MANOJKUMAR JAIN
                                            20 SMJV Sandhurst Road
                                                SMJV Sandhurst Road
      3 MOHIT SANJAY BOTRA
                                            19
      4 NAMAN MANOJKUMAR JAIN
                                                SMJV Sandhurst Road
      5 MANAS RAMESHKUMAR SANKLECHA
                                            20 SMJV Sandhurst Road
                                                SMJV Sandhurst Road
      6 AKSHAT JAYVANT JAIN
                                            19
         DISHANK PRAVIN HARAN
                                            20 SMJV Sandhurst Road
                                                SMJV Sandhurst Road
      8 MANTHAN RUPESH JAIN
      9 KAVYA NARENDRA JAIN
                                            18 SMJV Sandhurst Road
     10 VARUN MOHANLAL JAIN
                                            20 SMJV Sandhurst Road
     11 RAJ YOGESH SHAH
                                            22 SMJV Sandhurst Road
     12 CHAYAN ANIL JAIN
                                            19 SMJV Sandhurst Road
                                            17 SMJV Sandhurst Road
     13 PARTH VISHALKUMAR SHAH
                                            20 SMJV Sandhurst Road
     14 OM PAVANKUMAR SHETIYA
```

## 24. List all the employees who have left their jobs within the last year.



### 25. Find the average age of students in each hostel.

```
SELECT hostel_id, AVG(age) AS average_age
FROM Students
GROUP BY hostel_id;
```



26. Get the details of students who have dependent(s) with a specific relation (e.g., 'parent').

```
SELECT s.*, d.*

FROM Students s

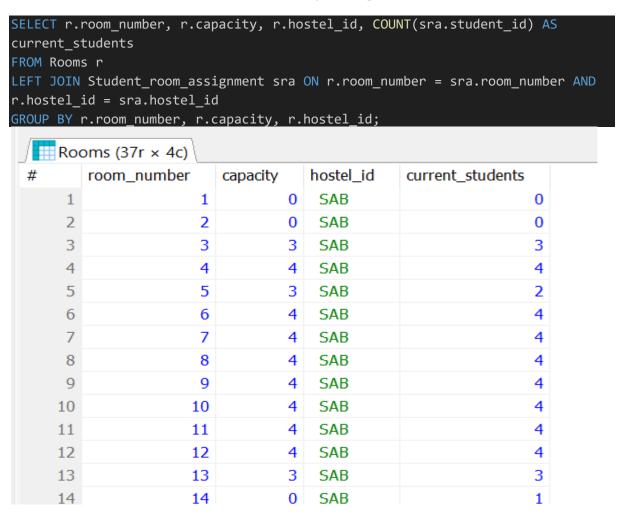
JOIN Dependents d ON s.student_id = d.student_id

WHERE d.relation = 'specific_relation';

# students (or x 15c)

# student d P name address age course student_phone_number dependent_phone_number date_of_join date_of_leave hoste_id P student_id P dependent_phone_number na
```

27. List all the rooms with their respective capacities and the number of students currently assigned.



28. Find the total amount of fees collected from each mode of payment.

```
SELECT mode_of_payment, SUM(amount) AS total_fees_collected
FROM Fees
GROUP BY mode_of_payment;

Fees (1r × 2c)

# mode_of_payment total_fees_collected

1 NFT 9,040,000
```

29. Get the names and ages of all students who have not yet left their hostels.

```
SELECT name, age
FROM Students
WHERE date_of_leave IS NULL;

Students (Or × 2c)

# name age
```

30. List all the rooms where the number of currently assigned students exceeds the capacity.

```
SELECT r.room_number, r.capacity, r.hostel_id, COUNT(sra.student_id) AS
current_students
FROM Rooms r
LEFT JOIN Student_room_assignment sra ON r.room_number = sra.room_number AND
r.hostel_id = sra.hostel_id
GROUP BY r.room_number, r.capacity, r.hostel_id
HAVING current_students > r.capacity;
```

Rooms (3r × 4c)						
#	room_number	capacity	hostel_id	current_students		
1	14	0	SAB	1		
2	28	4	SAB	5		
3	29	4	SAB	6		

### 31. List all employees along with the total number of students they are responsible for managing.

```
SELECT e.employee_id, e.name, COUNT(s.student_id) AS total_students_managed
FROM Employees e
LEFT JOIN Students s ON e.hostel_id = s.hostel_id
GROUP BY e.employee_id, e.name;
 Employees (8r × 3c)
       employee_id
                                            total_students_managed
                       name
     1 SAB21203653
                        VIRENDRA VYAS
                                                              113
     2 SAB21204651
                        BAJRANG SALGAR
                                                              113
     3 SAB21205468
                        SANJU MAHARAJ
                                                              113
     4 SAB2130034
                        SHAILESH RATHOD
                                                              113
     5 SAB2130214
                        HERMANT SINGH
                                                              113
     6 SAB2130331
                        MOHANLAL PANDEY
                                                              113
     7 SAB2130468
                        YASHWANT RAO
                                                              113
                        NILESH PAWAR
     8 SAB2130469
                                                              113
```

#### 32. Find the hostel with the highest number of pending fees.

```
SELECT hostel_id, SUM(pending) AS total_pending_fees

FROM Fees

GROUP BY hostel_id

ORDER BY total_pending_fees DESC

LIMIT 1;

hostel_branch (1r × 2c)

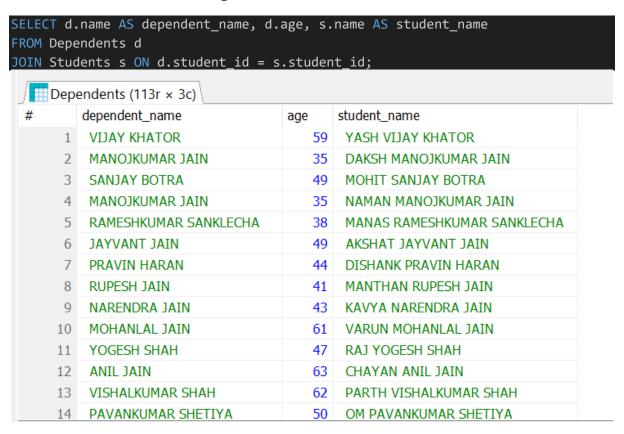
# hostel_id total_pending_fees

1 ANB 0.0
```

#### 33. List all the students who joined the hostel before the age of 18.

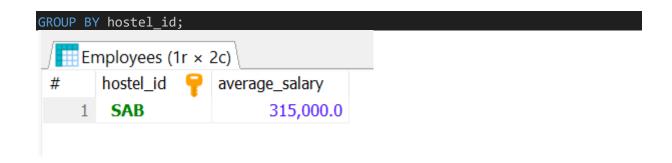


## 34. Get the names and ages of all dependents along with the names of their respective students.



#### 35. Find the average salary of employees in each hostel branch.

SELECT hostel\_id, AVG(salary) AS average\_salary
FROM Employees



36. List all the students who haven't paid any fees yet.

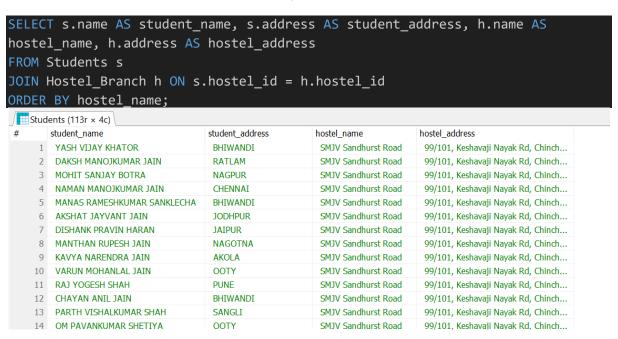
```
FROM Students s

LEFT JOIN Fees f ON s.student_id = f.student_id

WHERE f.student_id IS NULL;

# student_id ? name address age course student_phone_number dependent_phone_number date_of_join date_of_leave hostel_id ?
```

37. Get the names and addresses of students along with the names of their hostels, ordered by hostel name.

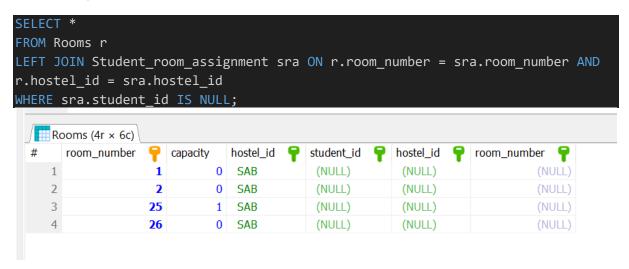


38. Find the total number of employees in each gender category (male/female).

```
SELECT gender, COUNT(*) AS total_employees
FROM Employees
```



39. List all the rooms that are currently vacant (not assigned to any student).



40. Get the names and ages of students who have paid the highest amount of fees in each hostel.

```
SELECT s.name AS student_name, s.age, f.hostel_id, MAX(f.amount) AS
highest_fee_paid
FROM Students s
JOIN Fees f ON s.student_id = f.student_id
GROUP BY f.hostel_id;

Students (1r × 4c)

# student_name age hostel_id highest_fee_paid
1 YASH VIJAY KHATOR 23 SAB 80,000
```

41. List all the hostels along with the total number of rooms and the average capacity of those rooms.

```
SELECT hb.hostel_id, hb.name, COUNT(r.room_number) AS total_rooms,
AVG(r.capacity) AS average capacity
FROM Hostel Branch hb
LEFT JOIN Rooms r ON hb.hostel id = r.hostel id
GROUP BY hb.hostel id, hb.name;
 Hostel_Branch (3r × 4c)
       hostel_id
                  hostel_name
                                         total_rooms
                                                       average_capacity
                   SMJV Andheri
       ANB
                                                    0
                                                                  (NULL)
    2 PUB
                   SMJV Pune
                                                    0
                                                                  (NULL)
    3 SAB
                   SMJV Sandhurst Road
                                                    37
                                                                  3.2432
```

42. Find the total amount of pending fees for each mode of payment.

```
SELECT mode_of_payment, SUM(pending) AS total_pending_fees
FROM Fees
GROUP BY mode_of_payment;

# mode_of_payment total_pending_fees

1 NFT 0.0
```

43. List all the students who have joined the hostel in the current year.

44. Get the names of the students along with the count of their dependents.

```
SELECT s.name AS student_name, COUNT(d.student_id) AS dependent_count
FROM Students s
LEFT JOIN Dependents d ON s.student_id = d.student_id
GROUP BY s.name;
```

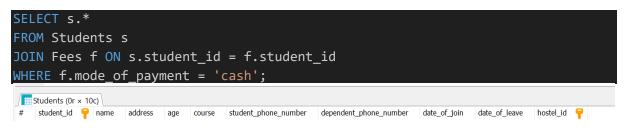
Stud	Students (113r × 2c)				
#	student_name	dependent_count			
1	AAGAM AMIT CHHAJED	1			
2	AAGAM NILESH JAIN	1			
3	ABHISHEK SACHIN GANDHI	1			
4	AKSHAT JAYVANT JAIN	1			
5	AKSHAT MOHAN GANDHI	1			
6	AKSHAT MUKESH DOSHI	1			
7	AKSHAT RANJIT JAIN	1			
8	AKSHAT VINOD LUNIA	1			
9	ARIHANT MAHENDRA KOTECHA	1			
10	ARYAN VISHAL KOTHARI	1			
11	ATHARVA ASHISH SISODIYA	1			
12	AVI AMIT SHAH	1			
13	AYUSH JAYESH JAIN	1			
14	AYUSH SANDEEP LUNIA	1			

#### 45. Find the employee with the highest salary in each hostel.

```
SELECT e.employee_id, e.name AS employee_name, e.salary, e.hostel_id
FROM Employees e
JOIN (
    SELECT hostel_id, MAX(salary) AS max_salary
    FROM Employees
    GROUP BY hostel_id
) AS max_sal ON e.hostel_id = max_sal.hostel_id AND e.salary =
max_sal.max_salary;

# employees (1r × 4c)
# employee_id employee_name salary hostel_id
1 SAB21203653 VIRENDRA VYAS 600,000.0 SAB
```

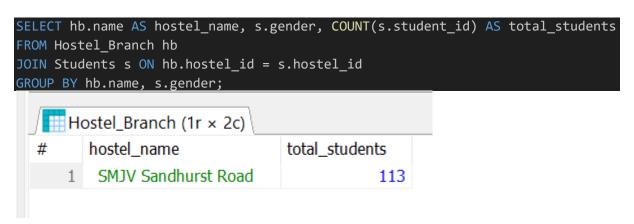
### 46. List all the students who are paying their fees through cash.



### 47. Get the names of all the rooms along with their respective hostels.

```
SELECT r.room_number, r.capacity, hb.name AS hostel_name
FROM Rooms r
JOIN Hostel Branch hb ON r.hostel id = hb.hostel id;
 Rooms (37r × 3c)
         room_number
                                       hostel_name
  #
                            capacity
                                       SMJV Sandhurst Road
       1
                         1
                                    0
       2
                         2
                                    0
                                       SMJV Sandhurst Road
                                        SMJV Sandhurst Road
       3
                         3
       4
                                       SMJV Sandhurst Road
                         4
                                    4
       5
                         5
                                       SMJV Sandhurst Road
                                    3
                                    4 SMJV Sandhurst Road
       6
                         6
       7
                                       SMJV Sandhurst Road
                         7
                                    4
       8
                         8
                                        SMJV Sandhurst Road
       9
                                    4 SMJV Sandhurst Road
                         9
      10
                        10
                                    4
                                        SMJV Sandhurst Road
                                    4 SMIV Sandhurst Road
      11
                        11
      12
                                    4 SMJV Sandhurst Road
                        12
                                    3 SMJV Sandhurst Road
      13
                        13
                                    0 SMJV Sandhurst Road
      14
                        14
```

### 48. Find the total number of male and female students in each hostel branch.



### 49. List all the employees who have joined the hostel in the past year.

#### 50. Find the average age of students in each hostel branch.

```
SELECT hb.name AS hostel_name, AVG(s.age) AS average_age
FROM Hostel_Branch hb

JOIN Students s ON hb.hostel_id = s.hostel_id

GROUP BY hb.name;

Hostel_Branch (1r × 2c)

# hostel_name average_age

1 SMJV Sandhurst Road 19.5044
```

### 51. List all the students who have not paid any fees yet.

#### 52. Find the total number of students staying in each room.

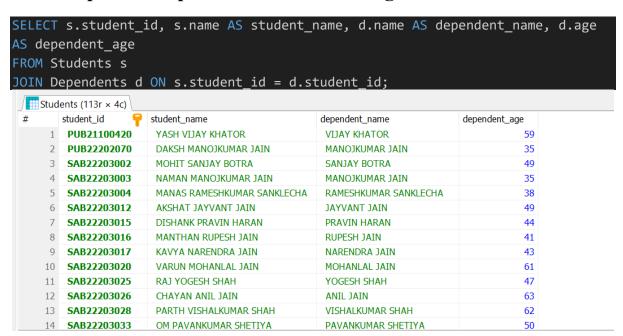
```
SELECT rsa.room_number, COUNT(rsa.student_id) AS total_students
FROM Student_room_assignment rsa
GROUP BY rsa.room_number;
```

Student_room_assignment (33r × 2c)				
#	room_number 💡	total_students		
1	3	3		
2	4	4		
3	5	2		
4	6	4		
5	7	4		
6	8	4		
7	9	4		
8	10	4		
9	11	4		
10	12	4		
11	13	3		
12	14	1		
13	15	3		
14	16	3		

53. Retrieve the names of all employees along with the total number of students they are responsible for in their respective hostels.

```
SELECT e.name AS employee_name, e.hostel_id, COUNT(s.student_id) AS
total students managed
FROM Employees e
LEFT JOIN Students s ON e.hostel_id = s.hostel_id
GROUP BY e.name, e.hostel id;
Employees (8r × 3c)
       employee_name
                              hostel_id
                                         total_students_managed
        BAJRANG SALGAR
    1
                               SAB
                                                             113
    2 HERMANT SINGH
                               SAB
                                                             113
    3
        MOHANLAL PANDEY
                               SAB
                                                             113
    4
        NILESH PAWAR
                               SAB
                                                             113
        SANJU MAHARAJ
                               SAB
    5
                                                             113
        SHAILESH RATHOD
    6
                               SAB
                                                             113
    7
        VIRENDRA VYAS
                               SAB
                                                             113
        YASHWANT RAO
                               SAB
                                                             113
```

### 54. List all the students who have dependent(s) and their respective dependents' names and ages.



#### 55. Find the total number of employees in each hostel branch.

```
SELECT hb.name AS hostel_name, COUNT(e.employee_id) AS total_employees
FROM Hostel_Branch hb

LEFT JOIN Employees e ON hb.hostel_id = e.hostel_id

GROUP BY hb.name;

Hostel_Branch (3r × 2c)

# hostel_name total_employees

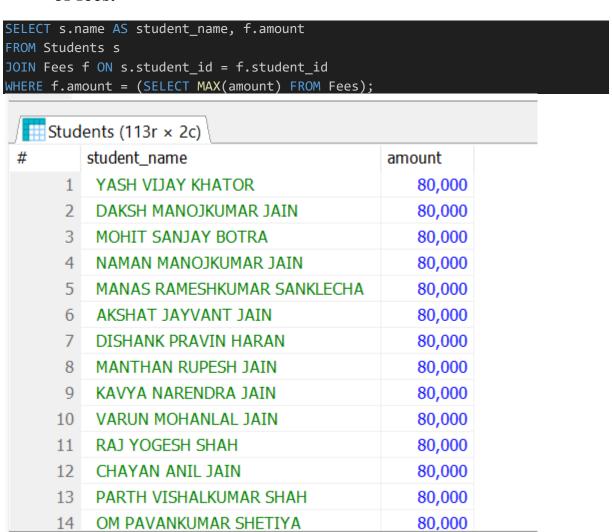
1 SMJV Andheri 0
2 SMJV Pune 0
3 SMJV Sandhurst Road 8
```

56. Retrieve the names of all the students who are staying in the hostel and have not yet left.

```
SELECT *
FROM Students
WHERE date_of_leave IS NULL;
```

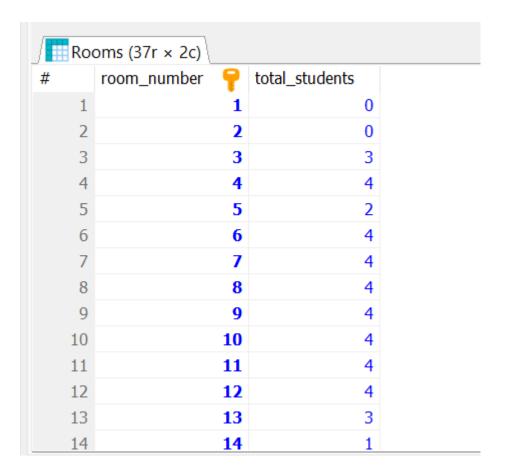


### 57. Get the names of students who have paid the highest amount of fees.

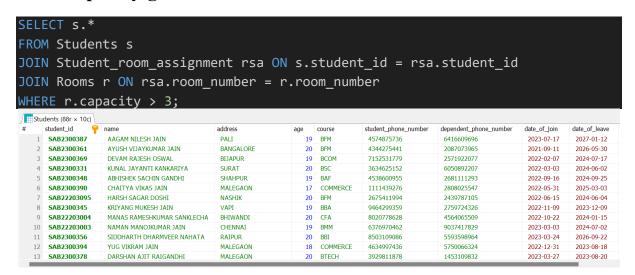


### 58. List all the rooms along with the count of students staying in each room.

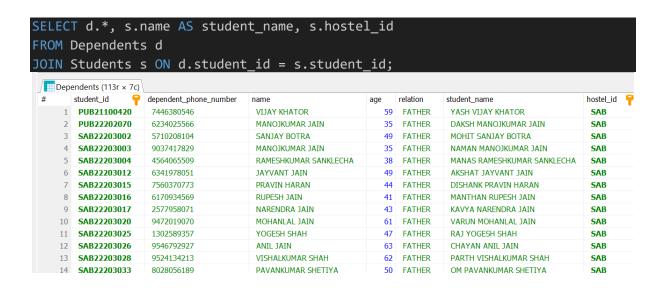
```
SELECT r.room_number, COUNT(rsa.student_id) AS total_students
FROM Rooms r
LEFT JOIN Student_room_assignment rsa ON r.room_number = rsa.room_number
GROUP BY r.room_number;
```



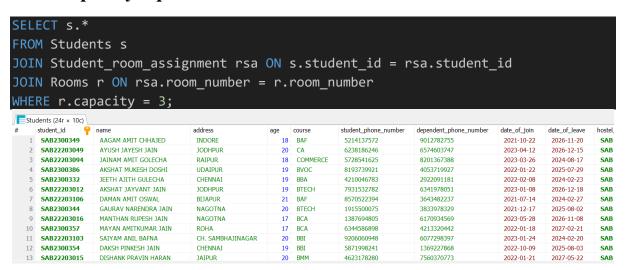
59. Find the names of students who are staying in rooms with a capacity greater than 3.



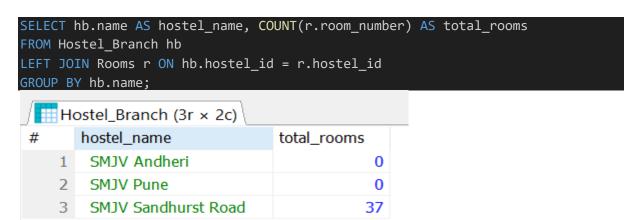
60. Get the names of all the dependents along with their respective student's name and hostel ID.



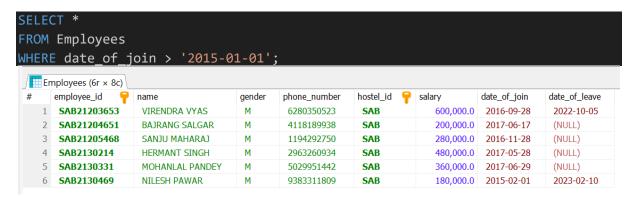
### 61. List all students who are currently staying in a room with a capacity equal to 3.



#### 62. Find the total number of rooms in each hostel branch.



63. Retrieve the names of employees who have joined after a specific date (e.g., '2015-01-01').

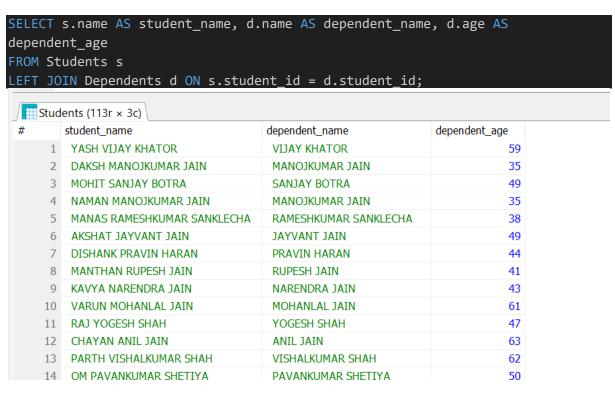


64. List all students along with the total amount of fees they have paid.

```
SELECT s.name AS student_name, SUM(f.amount) AS total_fees_paid
FROM Students s
LEFT JOIN Fees f ON s.student_id = f.student id
GROUP BY s.name;
  Students (113r × 2c)
 #
         student_name
                                             total_fees_paid
          AAGAM AMIT CHHAJED
                                                      80,000
       1
       2
          AAGAM NILESH JAIN
                                                      80,000
       3
          ABHISHEK SACHIN GANDHI
                                                      80,000
       4
          AKSHAT JAYVANT JAIN
                                                      80,000
       5
          AKSHAT MOHAN GANDHI
                                                      80,000
       6
          AKSHAT MUKESH DOSHI
                                                      80,000
       7
          AKSHAT RANJIT JAIN
                                                      80,000
       8
          AKSHAT VINOD LUNIA
                                                      80,000
       9
          ARIHANT MAHENDRA KOTECHA
                                                      80,000
      10
          ARYAN VISHAL KOTHARI
                                                      80,000
      11
          ATHARVA ASHISH SISODIYA
                                                      80,000
                                                      80,000
      12
          AVI AMIT SHAH
      13
          AYUSH JAYESH JAIN
                                                      80,000
      14
          AYUSH SANDEEP LUNIA
                                                      80,000
```

65. Find the names of all students who are not assigned to any room.

66. Retrieve the names of all students along with the names and ages of their dependents (if any).



67. List all rooms that are fully occupied (i.e., where the number of students equals the room capacity).

```
SELECT r.room_number

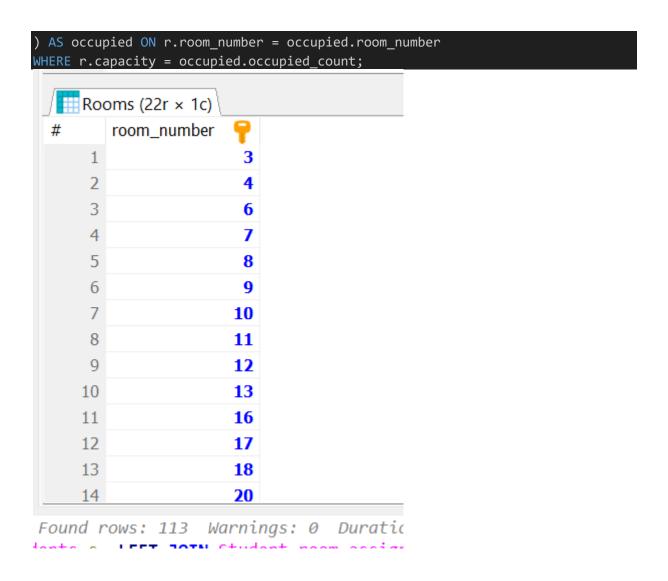
FROM Rooms r

JOIN (

SELECT room_number, COUNT(student_id) AS occupied_count

FROM Student_room_assignment

GROUP BY room_number
```



68. Get the names of students along with their course who have pending fees.

```
SELECT s.name AS student_name, s.course, f.pending

FROM Students s

JOIN Fees f ON s.student_id = f.student_id

WHERE f.pending > 0;

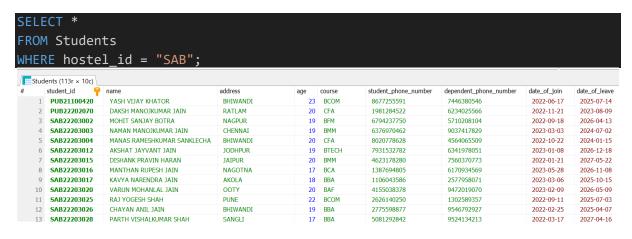
# Students (Or × 3c)

# student_name course pending
```

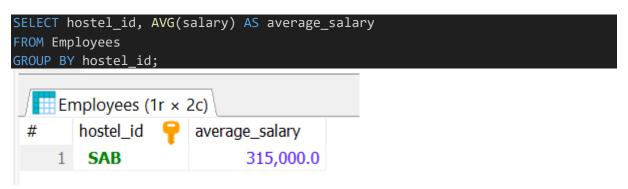
69. Retrieve the names of all employees and the total number of years they have been working in the hostel (based on the date of joining).

yea	rs_wo		ESTAMPDIFF(YEAR, o	late_of_join, CURDATE()) AS
	E	mployees (8r × 2c)		
7	#	employee_name	years_worked	
	1	VIRENDRA VYAS	7	
	2	BAJRANG SALGAR	6	
	3	SANJU MAHARAJ	7	
	4	SHAILESH RATHOD	10	
	5	HERMANT SINGH	6	
	6	MOHANLAL PANDEY	6	
	7	YASHWANT RAO	10	
	8	NILESH PAWAR	9	

70. List all students who are staying in a specific hostel branch (e.g., hostel\_id = "SAB").



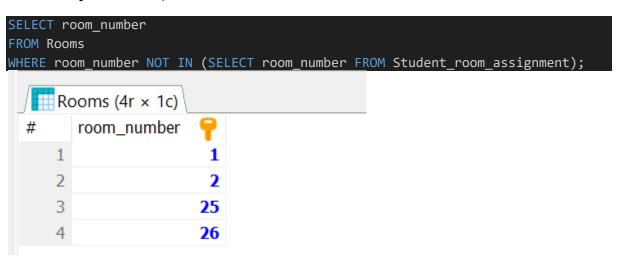
71. Find the average salary of employees in each hostel branch.



## 72. Retrieve the names of students along with the total amount of pending fees they have.

```
SELECT s.name AS student_name, SUM(f.pending) AS total_pending_fees
FROM Students s
JOIN Fees f ON s.student id = f.student id
GROUP BY s.name;
 Students (113r × 2c)
        student_name
                                     total_pending_fees
      1 AAGAM AMIT CHHAJED
                                                   0.0
      2 AAGAM NILESH JAIN
                                                   0.0
udent_nam
        ABHISHEK SACHIN GANDHI
                                                    0.0
dent_id = f.studenf_id
                                                    0.0
      5 AKSHAT MOHAN GANDHI
                                                    0.0
      6 AKSHAT MUKESH DOSHI
                                                    0.0
      7 AKSHAT RANJIT JAIN
                                                    0.0
      8 AKSHAT VINOD LUNIA
                                                    0.0
      9 ARIHANT MAHENDRA KOTECHA
                                                    0.0
     10 ARYAN VISHAL KOTHARI
                                                   0.0
     11 ATHARVA ASHISH SISODIYA
                                                    0.0
     12 AVI AMIT SHAH
                                                    0.0
     13 AYUSH JAYESH JAIN
                                                    0.0
     14 AYUSH SANDEEP LUNIA
                                                    0.0
```

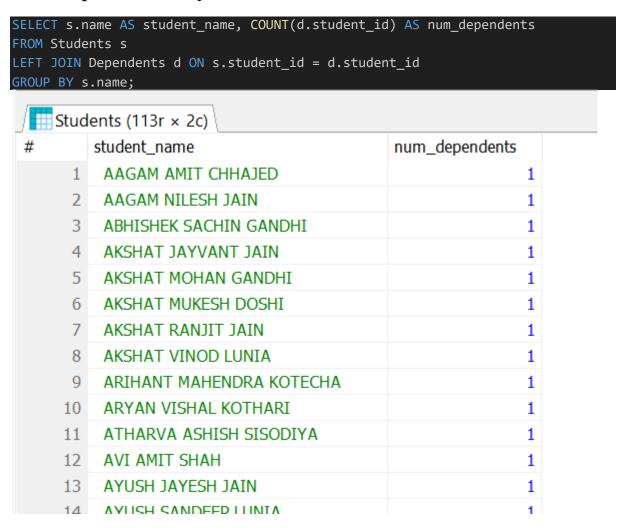
## 73. List all rooms that are currently empty (i.e., not assigned to any student).



74. Get the names of employees who have left the hostel after a specific date (e.g., '2023-01-01').



75. Retrieve the names of students along with the number of dependents they have.



76. List all students who have not paid any fees yet.

```
SELECT s.name AS student_name
FROM Students s
```

```
LEFT JOIN Fees f ON s.student_id = f.student_id

WHERE f.student_id IS NULL;

Students (Or × 1c) \

# student_name
```

77. Find the total number of employees in each hostel branch.

```
SELECT hostel_id, COUNT(*) AS total_employees

FROM Employees

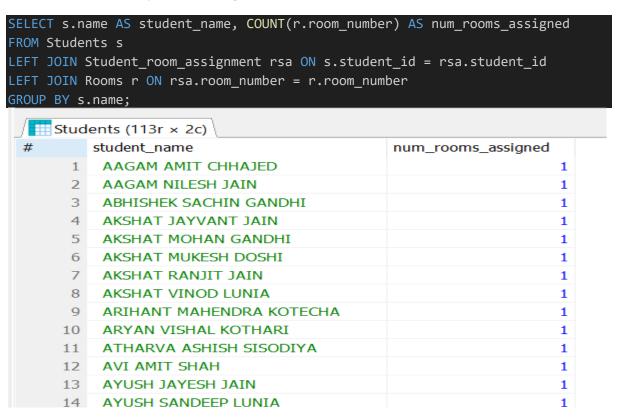
GROUP BY hostel_id;

Employees (1r × 2c)

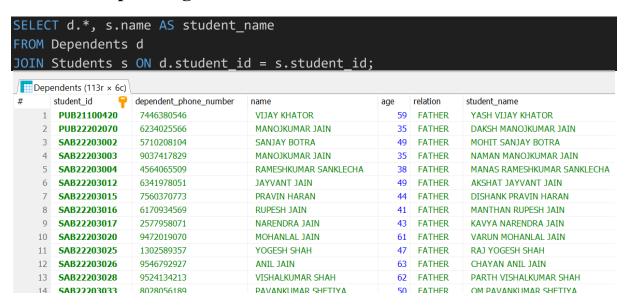
# hostel_id  total_employees

1 SAB  8
```

78. Retrieve the names of students along with the number of rooms they are assigned to.



### 79. List all dependents along with the names of their corresponding students.



## 80. Retrieve the names of students along with the total amount of fees they have paid till date.

```
SELECT s.name AS student_name, SUM(f.paid_till_date) AS total_fees_paid
FROM Students s
JOIN Fees f ON s.student_id = f.student_id
GROUP BY s.name;
 Students (113r × 2c)
          student_name
                                               total_fees_paid
           AAGAM AMIT CHHAJED
                                                    20,240,122
        1
        2
           AAGAM NILESH JAIN
                                                    20,240,123
        3
           ABHISHEK SACHIN GANDHI
                                                    20,240,114
        4
           AKSHAT JAYVANT JAIN
                                                    20,240,115
        5
           AKSHAT MOHAN GANDHI
                                                    20,240,108
           AKSHAT MUKESH DOSHI
                                                    20,240,117
        6
        7
           AKSHAT RANJIT JAIN
                                                    20,240,126
           AKSHAT VINOD LUNIA
        8
                                                    20,240,113
       9
           ARIHANT MAHENDRA KOTECHA
                                                    20,240,121
       10
           ARYAN VISHAL KOTHARI
                                                    20,240,106
           ATHARVA ASHISH SISODIYA
       11
                                                    20,240,106
                                                    20,240,110
       12
           AVI AMIT SHAH
       13
           AYUSH JAYESH JAIN
                                                    20,231,225
```

20,231,223

14

AYUSH SANDEEP LUNIA

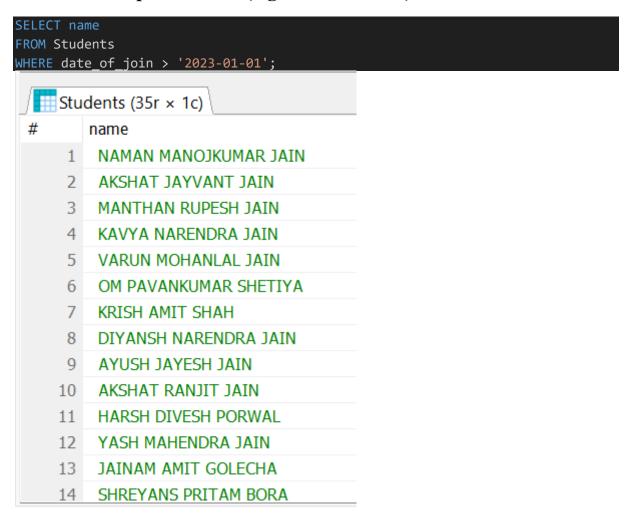
81. Find the average age of students in each hostel branch.

```
SELECT hostel_id, AVG(age) AS average_age
FROM Students
GROUP BY hostel_id;

Students (1r × 2c)

# hostel_id average_age
1 SAB 19.5044
```

82. Retrieve the names of students who have joined the hostel after a specific date (e.g., '2023-01-01').



### 83. List all rooms along with their capacities and the number of students currently assigned to each room.

```
SELECT r.room_number, r.capacity, COUNT(sra.student_id) AS
num_students_assigned
FROM Rooms r
LEFT JOIN Student_room_assignment sra ON r.room_number = sra.room_number
GROUP BY r.room_number;
```

√∰Ro	oms (37r × 3c)		
#	room_number 🥊	capacity	num_students_assigned
1	1	0	0
2	2	0	0
3	3	3	3
4	4	4	4
5	5	3	2
6	6	4	4
7	7	4	4
8	8	4	4
9	9	4	4
10	10	4	4
11	11	4	4
12	12	4	4
13	13	3	3
14	14	0	1

84. Retrieve the names of employees along with their genders and the hostel branch they are assigned to.

```
SELECT e.name AS employee_name, e.gender, h.name AS hostel_branch
FROM Employees e
JOIN Hostel_Branch h ON e.hostel_id = h.hostel_id;
```

/ <b>III</b> (	Employees (8r × 3c)						
#	employee_name	gender	hostel_branch				
1	VIRENDRA VYAS	М	SMJV Sandhurst Road				
2	BAJRANG SALGAR	М	SMJV Sandhurst Road				
3	SANJU MAHARAJ	М	SMJV Sandhurst Road				
4	SHAILESH RATHOD	М	SMJV Sandhurst Road				
E	HERMANT SINGH	М	SMJV Sandhurst Road				
6	MOHANLAL PANDEY	М	SMJV Sandhurst Road				
7	YASHWANT RAO	М	SMJV Sandhurst Road				
8	NILESH PAWAR	М	SMJV Sandhurst Road				

### 85. List all students who have dependent(s) and their respective dependent(s) names.

SELECT s.name AS student\_name, d.name AS dependent\_name FROM Students s JOIN Dependents d ON s.student\_id = d.student\_id; Students (113r × 2c) student name dependent\_name 1 YASH VIJAY KHATOR VIJAY KHATOR 2 DAKSH MANOJKUMAR JAIN MANOJKUMAR JAIN 3 MOHIT SANJAY BOTRA SANJAY BOTRA 4 NAMAN MANOJKUMAR JAIN MANOJKUMAR JAIN 5 MANAS RAMESHKUMAR SANKLECHA RAMESHKUMAR SANKLECHA 6 AKSHAT JAYVANT JAIN JAYVANT JAIN 7 DISHANK PRAVIN HARAN PRAVIN HARAN 8 MANTHAN RUPESH JAIN RUPESH JAIN 9 KAVYA NARENDRA JAIN NARENDRA JAIN 10 VARUN MOHANLAL JAIN MOHANLAL JAIN 11 RAJ YOGESH SHAH YOGESH SHAH 12 CHAYAN ANIL JAIN ANIL JAIN VISHALKUMAR SHAH 13 PARTH VISHALKUMAR SHAH PAVANKUMAR SHETIYA 14 OM PAVANKUMAR SHETIYA

#### 86. Find the total number of rooms in each hostel branch.

SELECT h.name AS hostel\_branch, COUNT(\*) AS total\_rooms FROM Hostel\_Branch h

```
JOIN Rooms r ON h.hostel_id = r.hostel_id

GROUP BY h.name;

Hostel_Branch (1r × 2c)

# hostel_branch total_rooms

1 SMJV Sandhurst Road 37
```

87. Retrieve the names of students along with the total amount of fees they have paid in a specific month (e.g., January 2023).

```
SELECT s.name AS student_name, SUM(f.amount) AS total_fees_paid

FROM Students s

JOIN Fees f ON s.student_id = f.student_id

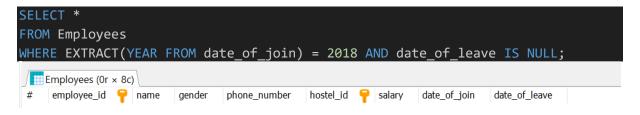
WHERE EXTRACT(MONTH FROM f.date) = 1 AND EXTRACT(YEAR FROM f.date) = 2023

GROUP BY s.name;

Students (Or × 2c)

# student_name total_fees_paid
```

88. List all employees who joined the hostel in a specific year (e.g., 2018) and are still working.



89. Find the names of students who have paid their fees using a specific mode of payment (e.g., 'Credit Card').

```
SELECT s.name AS student_name
FROM Students s
JOIN Fees f ON s.student_id = f.student_id
WHERE f.mode_of_payment = 'Credit Card';
```

```
# student_name
```

90. Retrieve the names of students who have left the hostel along with their departure dates.

```
SELECT name AS student name, date of leave
FROM Students
WHERE date of leave IS NOT NULL;
 Students (113r × 2c)
                                           date_of_leave
         student_name
         YASH VIJAY KHATOR
                                            2025-07-14
      2
         DAKSH MANOJKUMAR JAIN
                                            2023-08-09
      3
         MOHIT SANJAY BOTRA
                                            2026-04-13
      4
         NAMAN MANOJKUMAR JAIN
                                            2024-07-02
      5
         MANAS RAMESHKUMAR SANKLECHA
                                            2024-01-15
         AKSHAT JAYVANT JAIN
                                            2026-12-18
      7
         DISHANK PRAVIN HARAN
                                            2027-05-22
         MANTHAN RUPESH JAIN
                                            2026-11-08
      8
      9
         KAVYA NARENDRA JAIN
                                            2025-10-15
     10
         VARUN MOHANLAL JAIN
                                            2026-05-09
     11
         RAJ YOGESH SHAH
                                            2025-07-03
         CHAYAN ANIL JAIN
                                            2025-04-07
     12
     13
         PARTH VISHALKUMAR SHAH
                                            2027-04-16
     14 OM PAVANKUMAR SHETIYA
                                            2026-07-14
```

91. Find the total number of students in each course residing in each hostel branch.

```
SELECT hostel_id, course, COUNT(*) AS num_students
FROM Students
```

GROUP BY hostel_id, course;				
Students (17r × 3c)				
#	hostel_id	course	num_students	
1	SAB	BAF	19	
2	SAB	BBA	16	
3	SAB	BBI	13	
4	SAB	BCA	5	
5	SAB	BCOM	11	
6	SAB	BFM	13	
7	SAB	BLS	1	
8	SAB	BMM	7	
9	SAB	BMS	2	
10	SAB	BSC	1	
11	SAB	BTECH	8	
12	SAB	BVOC	1	
13	SAB	CA	5	
14	SAB	CFA	3	

# 92. Retrieve the names of students along with the total amount of pending fees they have.

```
SELECT s.name AS student_name, SUM(f.pending) AS total_pending_fees
FROM Students s
JOIN Fees f ON s.student_id = f.student_id
GROUP BY s.name;
 Students (113r × 2c)
         student_name
                                             total_pending_fees
          AAGAM AMIT CHHAJED
                                                            0.0
          AAGAM NILESH JAIN
                                                            0.0
           ABHISHEK SACHIN GANDHI
                                                            0.0
          AKSHAT JAYVANT JAIN
       4
                                                            0.0
       5
          AKSHAT MOHAN GANDHI
                                                            0.0
          AKSHAT MUKESH DOSHI
                                                            0.0
       6
       7
           AKSHAT RANJIT JAIN
                                                            0.0
           AKSHAT VINOD LUNIA
       8
                                                            0.0
       9
           ARIHANT MAHENDRA KOTECHA
                                                            0.0
      10
           ARYAN VISHAL KOTHARI
                                                            0.0
      11
           ATHARVA ASHISH SISODIYA
                                                            0.0
      12
           AVI AMIT SHAH
                                                            0.0
      13
           AYUSH JAYESH JAIN
                                                            0.0
           AYUSH SANDEEP LUNIA
                                                            0.0
```

93. List all rooms along with the number of students assigned to each room, ordered by the number of students in descending order.

```
SELECT r.room_number, COUNT(sra.student_id) AS num_students_assigned

FROM Rooms r

LEFT JOIN Student_room_assignment sra ON r.room_number = sra.room_number

GROUP BY r.room_number

ORDER BY num_students_assigned DESC;

# room_number num_students_assigned
```

Ro	oms (37r × 2c) (		
#	room_number	num_students_assigned	
1	29	6	
2	28	5	
3	4	4	
4	20	4	
5	21	4	
6	6	4	
7	7	4	
8	8	4	
9	9	4	
10	10	4	
11	11	4	
12	12	4	
13	30	4	
14	31	4	

94. Find the names of students who are assigned to rooms in a specific hostel branch (e.g., 'SAB').

```
SELECT s.name AS student_name
FROM Students s
JOIN Student_room_assignment sra ON s.student_id = sra.student_id
JOIN Hostel_Branch h ON sra.hostel_id = h.hostel_id
WHERE h.name = 'SAB';
```

```
# students (0r × 1c) 
# student_name
```

95. Retrieve the names of employees who have left the hostel along with their departure dates.

```
FROM Employees
WHERE date_of_leave IS NOT NULL;

# employee_name date_of_leave

1 VIRENDRA VYAS 2022-10-05
2 NILESH PAWAR 2023-02-10
```

96. List all students who have dependent(s) older than 18 years.

```
SELECT s.name AS student_name
FROM Students s
JOIN Dependents d ON s.student_id = d.student_id
WHERE d.age > 18;
 Students (113r × 1c)
          student_name
          YASH VIJAY KHATOR
       2
          DAKSH MANOJKUMAR JAIN
       3
          MOHIT SANJAY BOTRA
       4
          NAMAN MANOJKUMAR JAIN
       5
          MANAS RAMESHKUMAR SANKLECHA
       6
          AKSHAT JAYVANT JAIN
       7
          DISHANK PRAVIN HARAN
       8
          MANTHAN RUPESH JAIN
       9
          KAVYA NARENDRA JAIN
      10
          VARUN MOHANLAL JAIN
      11
          RAJ YOGESH SHAH
      12
          CHAYAN ANIL JAIN
          PARTH VISHALKUMAR SHAH
      13
          OM PAVANKUMAR SHFTIYA
```

97. Find the total amount of fees collected in each mode of payment.

```
SELECT mode_of_payment, SUM(amount) AS total_amount_collected

FROM Fees

GROUP BY mode_of_payment;

Fees (1r × 2c)

# mode_of_payment total_amount_collected

1 NFT 9,040,000
```

98. Retrieve the names of employees who have the highest salary in each hostel branch.

```
SELECT h.name AS hostel_branch, e.name AS employee_name, e.salary
FROM Employees e
JOIN Hostel_Branch h ON e.hostel_id = h.hostel_id
WHERE (e.hostel_id, e.salary) IN (
    SELECT hostel_id, MAX(salary)
    FROM Employees
    GROUP BY hostel_id
);

Employees (1r × 3c)

# hostel_branch employee_name salary

1 SMJV Sandhurst Road VIRENDRA VYAS 600,000.0
```

99. List all rooms along with the number of students assigned to each room and the hostel branch they belong to.

```
SELECT r.room_number, COUNT(sra.student_id) AS num_students_assigned, h.name
AS hostel_branch
FROM Rooms r
LEFT JOIN Student_room_assignment sra ON r.room_number = sra.room_number
JOIN Hostel_Branch h ON r.hostel_id = h.hostel_id
GROUP BY r.room_number, h.name;
```

	room_number	num_students_assigned	hostel_branch
1	1	0	SMJV Sandhurst Road
2	2	0	SMJV Sandhurst Road
3	3	3	SMJV Sandhurst Road
4	4	4	SMJV Sandhurst Road
5	5	2	SMJV Sandhurst Road
6	6	4	SMJV Sandhurst Road
7	7	4	SMJV Sandhurst Road
8	8	4	SMJV Sandhurst Road
9	9	4	SMJV Sandhurst Road
10	10	4	SMJV Sandhurst Road
11	11	4	SMJV Sandhurst Road
12	12	4	SMJV Sandhurst Road
13	13	3	SMJV Sandhurst Road
14	14	1	SMJV Sandhurst Road

# 100. Retrieve the names of students who have paid their fees in full (i.e., pending amount is 0).

SELECT s.name AS student\_name FROM Students s JOIN Fees f ON s.student\_id =
f.student\_id WHERE f.pending = 0;
Students (113r x 1c)

Stud	dents (113r × 1c)	
#	student_name	
1	YASH VIJAY KHATOR	
2	DAKSH MANOJKUMAR JAIN	
3	MOHIT SANJAY BOTRA	
4	NAMAN MANOJKUMAR JAIN	
5	MANAS RAMESHKUMAR SANKLECHA	
6	AKSHAT JAYVANT JAIN	
7	DISHANK PRAVIN HARAN	
8	MANTHAN RUPESH JAIN	
9	KAVYA NARENDRA JAIN	
10	VARUN MOHANLAL JAIN	
11	RAJ YOGESH SHAH	
12	CHAYAN ANIL JAIN	
13	PARTH VISHALKUMAR SHAH	
14	OM PAVANKLIMAR SHFTIYA	