PROBLEM STATEMENT:

In this project, we have designed a database management system to store and manage the information about a student's details, Hostel allotment and Complaint management. The Database will contain important information about the students Hostel allotment and issues faced by students in hostels. This Database will contain the students' details, hostel allotment details, hostel and room details, payment details, worker details and complaints filed by students. This Database will help the students and officials during the Room allotment process and lets them know about the complaint status i.e., whether the complaint raised by student is resolved or not.

ASSUMPTONS:

1. One Student can be allotted only one room.
2. A hostel is completely for male or completely for female.
3. Multiple Hostels can Have same Room number.
4. One Worker can simultaneously work on many queries.
5. One student can launch any number of complaints.

TABLES:

Students:

Attributes	Datatypes	Constraints
Stu_roll_no	Varchar(9)	Primary key
Stu_name	Varchar(30)	NOT NULL
Stu_dept	Varchar(10)	NOT NULL
Stu_ph_no	Varchar(10)	Unique
Email	Varchar(20)	Unique
Gender	Varchar(6)	NOT NULL
Stu_year	Int	NOT NULL
Password	Varchar(16)	NOT NULL

Hostel:

Attributes	Datatypes	Constraints
Hostel_id	Varchar(10)	Primary key
Hostel_name	Varchar(10)	NOT NULL
Rooms_capacity	Int	NOT NULL
Annual fee	Int	NOT NULL
Gender	Varchar(5)	NOT NULL

Room:

Attributes	Datatypes	Constraints
Room_no	Varchar(6)	Primary key
Hostel_id	Varchar(10)	
Capacity	Int	NOT NULL
Status	bool	NOT NULL

Work:

Attributes	Datatypes	Constraints
Work_dept_id	Varchar(10)	Primary key
Dept_name	Varchar(10)	NOT NULL

Workers:

Attributes	Datatypes	Constraints
Worker_id	Varchar(10)	Primary key
Worker_name	Varchar(30)	NOT NULL
Worker_ph_no	Varchar(10)	Unique
Work_dept_id	Varchar(10)	Foreign key
Active	Bool	NOT NULL
Complaints_resolved	Int	NOT NULL

Mess:

Attributes	Datatypes	Constraints
Mess_id	Varchar(10)	Primary key
Mess_name	Varchar(15)	NOT NULL
Per_day_cost	Int	NOT NULL
Mess_incharge	Varchar(10)	NOT NULL
Contractor	Varchar(15)	NOT NULL

Allotment:

Attributes	Datatypes	Constraints
Payment_id	Varchar(10)	Primary key
Payment_amount	Int	NOT NULL
Payment_date	Date	NOT NULL
Hostel_id	Varchar(10)	Foreign key
Room_no	Varchar(6)	Foreign key
Stu_roll_no	Varchar(9)	Foreign key
Mess_id	Varchar(15)	Foreign key

Complaints:

Attributes	Datatypes	Constraints
Complaint_id	Varchar(10)	Primary key
Stu_roll_no	Varchar(9)	Foreign key
Work_dept_id	Varchar(10)	Foreign key
Room_no	Varchar(6)	Foreign key
Hostel_id	Varchar(10)	Foreign key
Complaint	Varchar(100)	NOT NULL
Worker_id	Varchar(10)	Foreign key
Resolved	bool	NOT NULL

FUNCTIONAL DEPENDENCIES AND PRIMARY KEY:

1.Students:

Stu_roll_no → {Stu_name, Stu_dept, Stu_ph_no, Email, Gender, Stu_year, Password}

Since all the fields depend on Stu_roll_no, (Stu_roll_no) + → R.

Hence, Stu_roll_no is a primary key.

2.Hostel:

Hostel_id → { Hostel_name, Rooms_capcity, Annual_fee, Gender}

Since all the fields depend on Hostel_name, (Hostel_name) + → R.

Hence, Hostel_name is a primary key.

3.Room:

(Room_no, Hostel_id) → {capacity, Status}

Since all the fields depend on (Room_no, Hostel_id), (Room_no, Hostel_id)+ → R.

Hence, (Room_no, Hostel_id) is a primary key.

4.Work:

Work_dept_id → {dept_name}

Since all the fields depend on Work_dept_id, (Work_dept_id) + → R.

Hence, Work_dept_id is a primary key.

5.Workers:

Worker_id → {Worker_name, Worker_ph_no, Work_dept_id, Active, Complaints_resolved}

Since all the fields depend on Worker_id, (Worker_id) + → R.

Hence, Worker_id is a primary key.

6.Mess:

Mess_id → {Mess_name, Per_day_cost, Mess_incharge, Contractor}

Since all the fields depend on Mess_id, (Mess_id) + → R.

Hence, Mess_id is a primary key.

7.Allotment:

Payment_id → {Payment_amount, Payment_date, Hostel_id, Room_no, Stu_roll_no, Mess_id}

Since all the fields depend on Payment_id, (Payment_id) + → R.

Hence, Payment_id is a primary key.

8.Complaints:

{Complaint_id} → {Stu_roll_no, Work_dept_id, Room_no, Hostel_id, Complaint, Worker_id, Resolved}

Since all the fields depend on (Complaint_id) + → R.

Hence, (Complaint_id) is a primary key.

NORMAISATION:

1.Student:

Primary key: Stu_roll_no

All attributes depend on the Stu_roll_no, hence the table is in 2NF.

All attributes depend directly on Stu_roll_no, hence the table is in 3NF.

All determinants (Stu_roll_no) is Super key, hence the table is in BCNF.

2.Hostel:

Primary key: Hostel_id

All attributes depend on the Hostel_id, hence the table is in 2NF.

All attributes depend directly on Hostel_id, hence the table is in 3NF.

All determinants (Hostel_id) is Super key, hence the table is in BCNF.

3.Room:

Primary key: Room_no

All attributes depend on the Room_no, hence the table is in 2NF.

All attributes depend directly on Room_no, hence the table is in 3NF.

All determinants (Room_no) is Super key, hence the table is in BCNF.

4.Work:

Primary key: Work_dept_id

All attributes depend on the Work_dept_id, hence the table is in 2NF.

All attributes depend directly on Work_dept_id, hence the table is in 3NF.

All determinants (Work_dept_id) is Super key, hence the table is in BCNF.

5.Workers:

Primary key: Worker_id

All attributes depend on the Worker_id, hence the table is in 2NF.

All attributes depend directly on Worker_id, hence the table is in 3NF.

All determinants (Worker_id) is Super key, hence the table is in BCNF.

6.Mess:

Primary key: Mess_id

All attributes depend on the Mess_id, hence the table is in 2NF.

All attributes depend directly on Mess_id, hence the table is in 3NF.

All determinants (Mess_id) is Super key, hence the table is in BCNF.

7.Allotment:

Primary key: Payment_id

All attributes depend on the Payment_id, hence the table is in 2NF.

All attributes depend directly on Payment_id, hence the table is in 3NF.

All determinants (Payment_id) is Super key, hence the table is in BCNF.

8.Complaints:

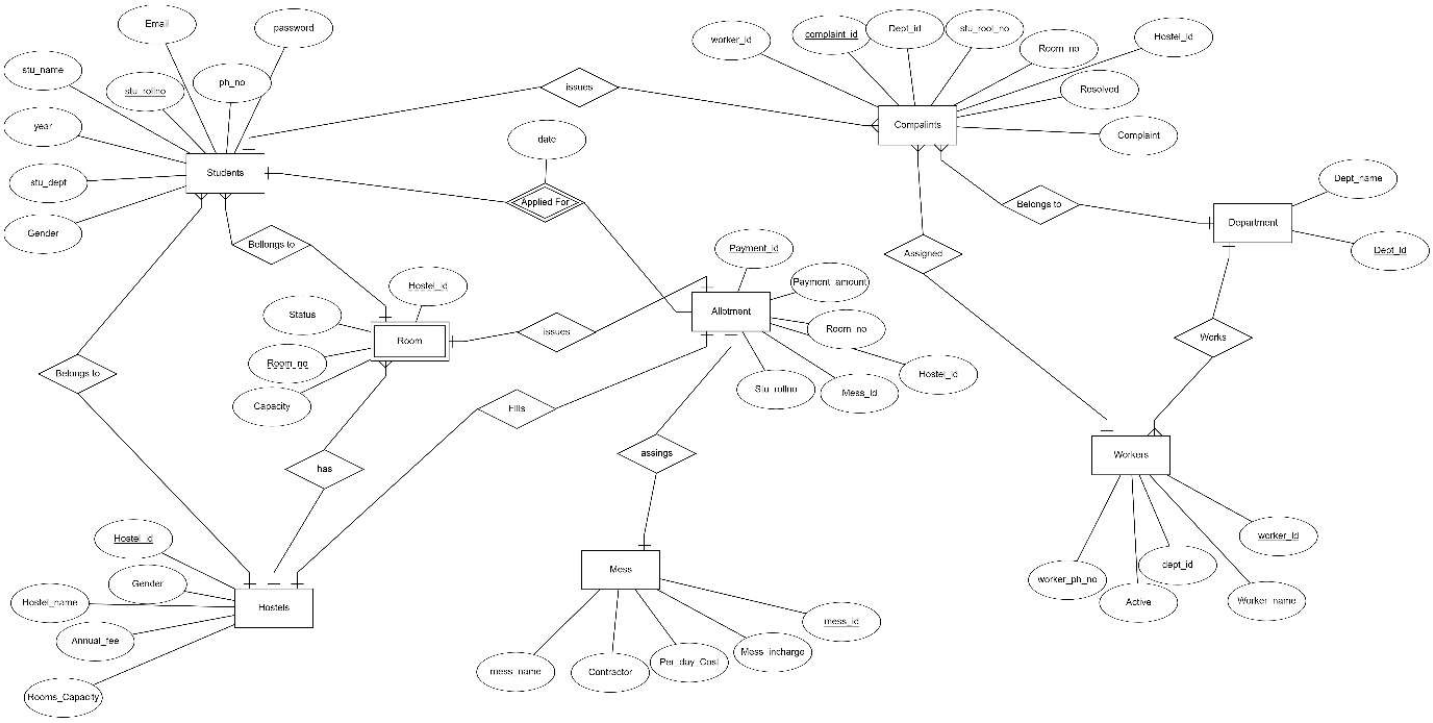
Primary key: Complaint_id

All attributes depend on the Complaint_id, hence the table is in 2NF.

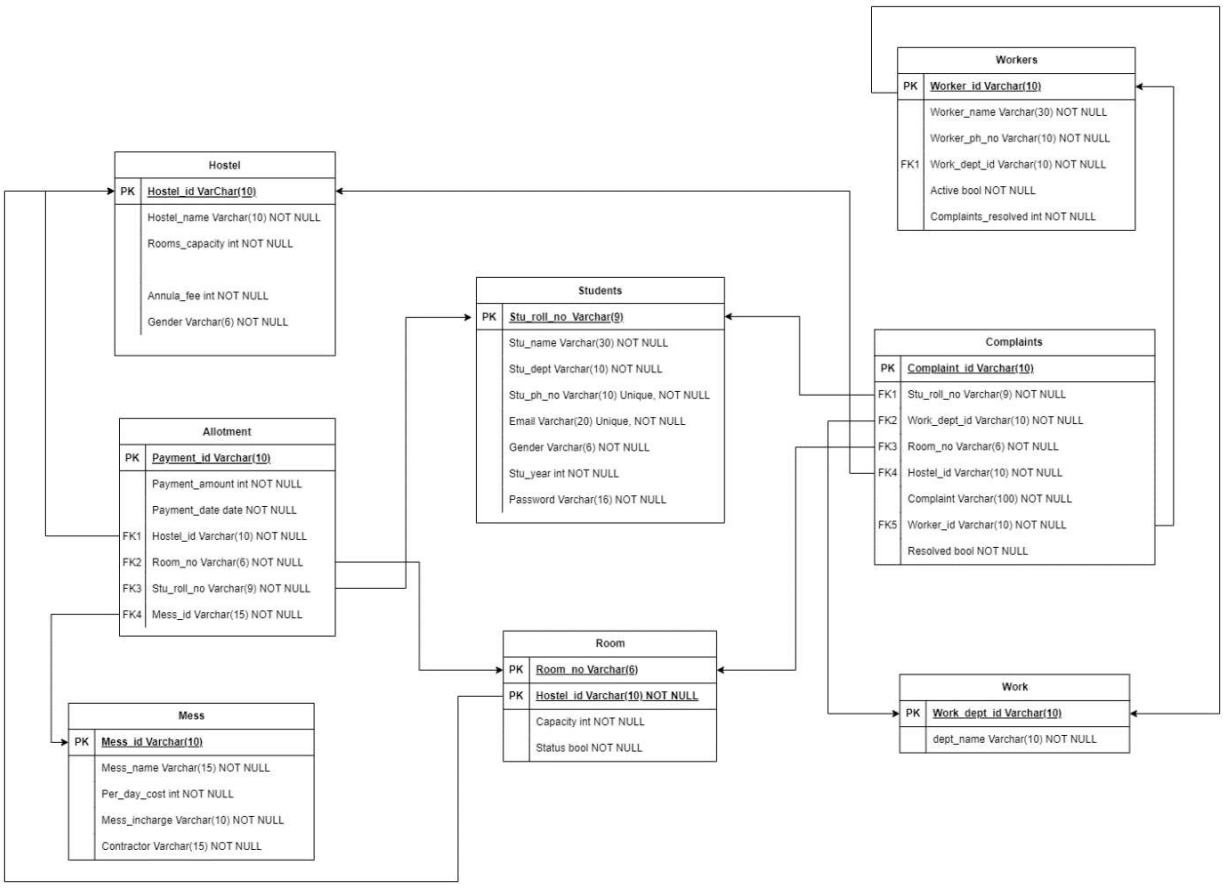
All attributes depend directly on Complaint_id, hence the table is in 3NF.

All determinants (Complaint_id) is Super key, hence the table is in BCNF.

ER DIAGRAM:



RELATIONAL SCHEMA:



MYSQL CODES:

Creating Tables:

```
CREATE DATABASE HOSTEL_MANAGEMENT_SYSTEM;
```

```
CREATE TABLE Students(
    Stu_roll_no varchar(9) PRIMARY KEY,
    Stu_name varchar(30) NOT NULL,
    Stu_dept varchar(10) NOT NULL,
    Stu_ph_no varchar(10) UNIQUE,
    Email varchar(20) UNIQUE,
    Gender varchar(6) NOT NULL,
    Stu_year int NOT NULL,
    Password varchar(16) NOT NULL
)
```

```
CREATE TABLE Hostel(
    Hostel_id varchar(10) PRIMARY KEY,
    Hostel_name varchar(10) NOT NULL,
    Rooms_capacity int NOT NULL,
    Annual_fee int NOT NULL,
    Gender varchar(6) NOT NULL
)
```

```
CREATE TABLE Room(
    Room_no varchar(6),
    Hostel_id varchar(10),
    Capacity int NOT NULL,
    Status bool NOT NULL,
    PRIMARY KEY(Room_no, Hostel_id),
    FOREIGN KEY(Hostel_id) REFERENCES Hostel(Hostel_id) ON DELETE CASCADE
)
```

```
CREATE TABLE Work(
    Work_dept_id Varchar(10) PRIMARY KEY,
    Dept_name varchar(10) NOT NULL
)
```

```sql
CREATE TABLE Workers(
    Worker_id varchar(10) PRIMARY KEY,
    Worker_name varchar(30) NOT NULL,
    Worker_ph_no varchar(10) UNIQUE,
    Work_dept_id varchar(10),
    Active bool NOT NULL,
    Complaints_resolved int NOT NULL,
    FOREIGN KEY (Work_dept_id) REFERENCES Work(Work_dept_id) ON DELETE SET NULL
)
```

```sql
CREATE TABLE Mess(
    Mess_id varchar(10) PRIMARY KEY,
    Mess_name varchar(15) NOT NULL,
    Per_day_cost int NOT NULL,
    Mess_incharge varchar(10) NOT NULL,
    Contractor varchar(15) NOT NULL
)
```

```sql
CREATE TABLE Allotment(
    Payment_id varchar(10) PRIMARY KEY,
    Payment_amount int NOT NULL,
    Payment_date date NOT NULL,
    Hostel_id varchar(10),
    Room_no varchar(6),
    Stu_roll_no varchar(9),
    Mess_id varchar(15),
    FOREIGN KEY (Hostel_id) REFERENCES Hostel(Hostel_id) ON DELETE SET NULL,
    FOREIGN KEY (Room_no) REFERENCES Room(Room_no) ON DELETE SET NULL,
    FOREIGN KEY (Stu_roll_no) REFERENCES Students(Stu_roll_no) ON DELETE SET NULL,
    FOREIGN KEY (Mess_id) REFERENCES Mess(Mess_id) ON DELETE SET NULL
)
```

```sql
CREATE TABLE Complaints(
    Complaint_id varchar(10) PRIMARY KEY,
    Stu_roll_no varchar(9),
    Work_dept_id varchar(10),
    Room_no varchar(6),
    Hostel_id varchar(10),
    Complaint varchar(100) NOT NULL,
    Worker_id varchar(10),
    Resolved bool DEFAULT false,
    FOREIGN KEY (Stu_roll_no) REFERENCES Students(Stu_roll_no) ON DELETE SET NULL,
    FOREIGN KEY (Work_dept_id) REFERENCES Work(Work_dept_id) ON DELETE SET NULL,
    FOREIGN KEY (Room_no) REFERENCES Room(Room_no) ON DELETE SET NULL,
    FOREIGN KEY (Hostel_id) REFERENCES Hostel(Hostel_id) ON DELETE SET NULL,
    FOREIGN KEY (Worker_id) REFERENCES Workers(Worker_id) ON DELETE SET NULL
)
```

INSERTING DATA:

```
INSERT INTO students VALUES('100','Abhinay Challa','EEE','9876543210','ac@gmail.com','male',2,'password123');
INSERT INTO students VALUES('101','Nikhil Boob','EEE','9638520741','nb@gmail.com','male',2,'qwerty123');
INSERT INTO students VALUES('102','Vignesh Bejugam','EEE','9517418263','vb@gmail.com','male',2,'asdf123');
INSERT INTO students VALUES('103','Kushpal Singh','CSE','7896541230','ks@gmail.com','male',3,'ksbr');
INSERT INTO students VALUES('113','Sravani T','BT','8526331454','st@gmail.com','female',4,'tsravs');
INSERT INTO students VALUES('109','Vinod konda','MME','7412566902','kv@gmail.com','male',3,'vkks');
INSERT INTO students VALUES('104','Krishna K V','MED','8529637410','kvksc@gmail.com','male',2,'kvkscmed');
INSERT INTO students VALUES('115','Vaishnavi k','MED','8523600142','vkv@gmail.com','female',3,'kvsv10');
INSERT INTO students VALUES('105','Rajasekhar k','CED','6985741230','rk@gmail.com','male',4,'lambu');
INSERT INTO students VALUES('116','Priyanka R','MME','7852001414','pri@gmail.com','female',2,'priyar45');
INSERT INTO students VALUES('111','Rishik YS','Chem','6521493335','ysr@gmail.com','male',4,'ysr69');
INSERT INTO students VALUES('106','Revanth Itte','EEE','8625147963','riit@gmail.com','male',4,'iitrpr');
INSERT INTO students VALUES('112','Sree Harshitha','MED','7569819555','sh@gmail.com','female',2,'csh18');
INSERT INTO students VALUES('118','Irfan M','CED','9632541086','irfm@gmail.com','male',2,'mdirfan786');
INSERT INTO students VALUES('117','Varshini B','ECE','9636985258','varb@gmail.com','female',2,'varshaa');
INSERT INTO students VALUES('107','Ravichandra k','CSE','7569284162','rck@gmail.com','male',3,'ravipuli');
INSERT INTO students VALUES('114','Madhavi P','Chem','7895412630','mp@gmail.com','female',3,'mpcamp');
INSERT INTO students VALUES('119','Naveen NS','CSE','8500102030','nss@gmail.com','male',2,'naveensir');
INSERT INTO students VALUES('110','Preetham P','BT','8562149003','pp@gmail.com','male',2,'ppandiri');
INSERT INTO students VALUES('108','Roshan kumar','ECE','8526314925','ark@gmail.com','male',4,'arkab');
```

```
INSERT INTO Hostel VALUES('hst1','Ultra Mega',1800,10000,'male');
INSERT INTO Hostel VALUES('hst2','Mega',1000,9000,'male');
INSERT INTO Hostel VALUES('4blk','Block 4',48,9500,'male');
INSERT INTO Hostel VALUES('6blk','Block 6',48,9500,'male');
INSERT INTO Hostel VALUES('3blk','Block 3',48,9500,'male');
INSERT INTO Hostel VALUES('LHA','Ladies A',500,12500,'female');
INSERT INTO Hostel VALUES('LHB','Ladies B',500,12500,'female');
INSERT INTO Hostel VALUES('LHC','Ladies C',500,12500,'female');
```

```
INSERT INTO Room VALUES('3104','3blk',3,true);
INSERT INTO Room VALUES('6304','6blk',3,false);
INSERT INTO Room VALUES('B101','hst1',2,true);
INSERT INTO Room VALUES('4307','4blk',3,true);
INSERT INTO Room VALUES('1216','LHA',2,true);
INSERT INTO Room VALUES('3225','hst2',2,true);
INSERT INTO Room VALUES('A305','hst1',2,true);
INSERT INTO Room VALUES('8808','LHB',2,true);
INSERT INTO Room VALUES('6212','6blk',3,false);
INSERT INTO Room VALUES('1312','LHC',3,true);
INSERT INTO Room VALUES('1418','LHC',3,false);
INSERT INTO Room VALUES('3117','LHC',3,true);
INSERT INTO Room VALUES('2345','hst2',2,true);
INSERT INTO Room VALUES('B106','hst1',2,false);
INSERT INTO Room VALUES('3232','LHA',2,false);
```

```
INSERT INTO work VALUES('CP', 'Carpentry');
INSERT INTO work VALUES('CL', 'Cleaning');
INSERT INTO work VALUES('PB', 'Plumber');
INSERT INTO work VALUES('EC', 'Electric');
INSERT INTO work VALUES('LA', 'Lan');
```

```
INSERT INTO workers VALUES('PB1','Ramesh','8523695147','PB',true,10);
INSERT INTO workers VALUES('EC1','Suresh','7469258145','EC',false,16);
INSERT INTO workers VALUES('CP1','Mukesh','7895741826','CP',true,8);
INSERT INTO workers VALUES('PB2','Ambani','9598362145','PB',false,15);
INSERT INTO workers VALUES('CL1','Ramu','8521436259','CL',true,14);
INSERT INTO workers VALUES('EC2','Sharma','9625147836','EC',true,25);
INSERT INTO workers VALUES('CL2','Shreyas','9558471114','CL',true,17);
INSERT INTO workers VALUES('LA1','Rakesh','6522415786','LA',true,12);
```

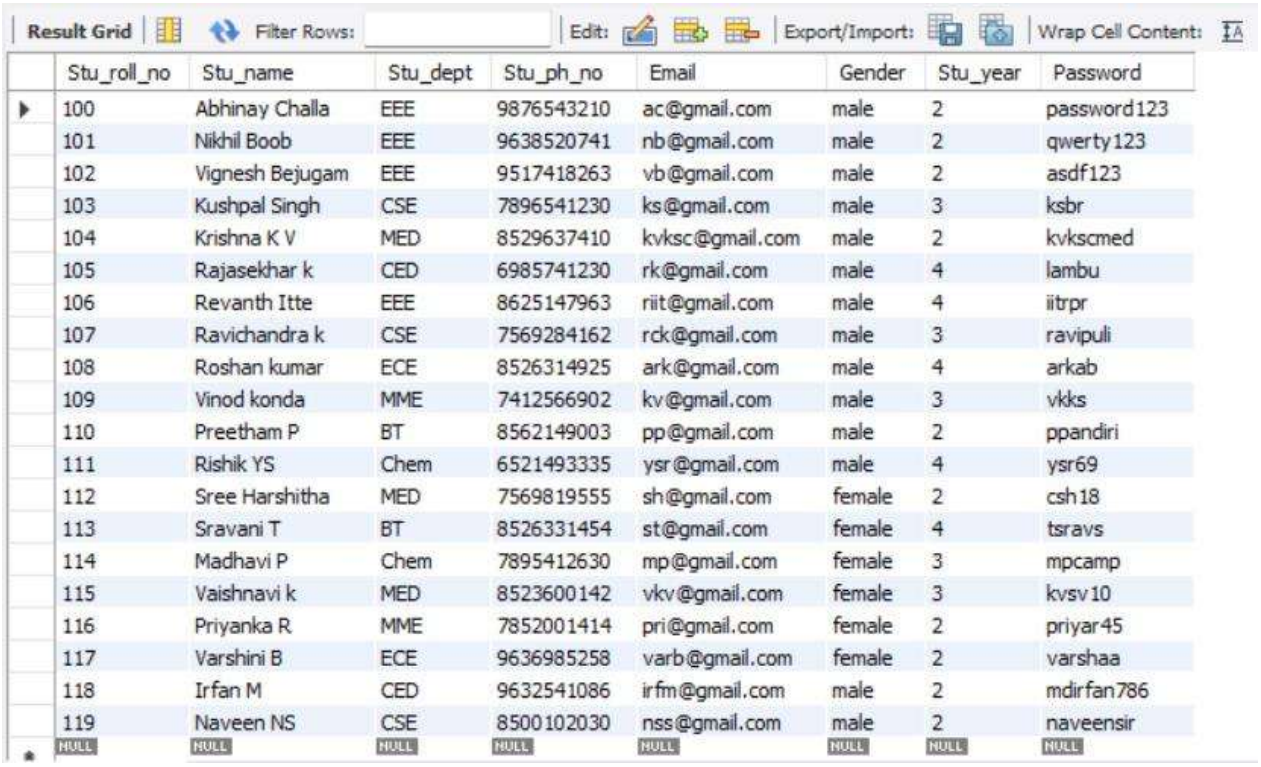
```
INSERT INTO Mess VALUES('mb1','IFCA',115,'Dr.Kishore','Suresh');
INSERT INTO Mess VALUES('mb2','IFCB',115,'Dr.Raghu','Arun');
INSERT INTO Mess VALUES('mb3','IFCC',115,'Dr.Yousuf','Srikanth');
INSERT INTO Mess VALUES('mg1','IFCG',115,'Dr.Vennela','Sujatha');
```

```
INSERT INTO allotment VALUES('360100',9500,'2023-06-24','3blk','3104','109','mb3');
INSERT INTO allotment VALUES('360101',10000,'2023-06-23','hst1','B101','105','mb1');
INSERT INTO allotment VALUES('360102',12500,'2023-06-20','LHA','1216','114','mg1');
INSERT INTO allotment VALUES('360103',9500,'2023-06-23','4blk','4307','111','mb3');
INSERT INTO allotment VALUES('360104',9000,'2023-06-19','hst2','3225','108','mb2');
INSERT INTO allotment VALUES('360105',10000,'2023-06-17','hst1','A305','100','mb1');
INSERT INTO allotment VALUES('360106',12500,'2023-06-22','LHC','3117','113','mg1');
INSERT INTO allotment VALUES('360107',12500,'2023-06-21','LHC','3117','116','mg1');
INSERT INTO allotment VALUES('360108',9000,'2023-06-25','hst2','3225','110','mb2');
INSERT INTO allotment VALUES('360109',9500,'2023-06-25','4blk','4307','102','mb3');
INSERT INTO allotment VALUES('360110',9500,'2023-06-25','4blk','4307','118','mb3');
INSERT INTO allotment VALUES('360111',10000,'2023-06-24','hst1','B101','103','mb1');
INSERT INTO allotment VALUES('360112',12500,'2023-06-23','LHC','1312','115','mg1');
INSERT INTO allotment VALUES('360113',7000,'2023-06-24','LHA','1216','112','mg1');
INSERT INTO allotment VALUES('360114',7000,'2023-06-22','LHB','8808','117','mg1');
INSERT INTO allotment VALUES('360115',9000,'2023-06-21','hst2','2345','106','mb2');
```

```
INSERT INTO complaints VALUES('cb01','100','PB','A305','hst1','Tap Leakage','PB1',false);
INSERT INTO complaints VALUES('cb02','102','EC','4307','4blk','Fan slow','EC1',true);
INSERT INTO complaints VALUES('cb03','109','LA','3104','3blk','Lan not working','LA1',true);
INSERT INTO complaints VALUES('cb04','110','CL','3225','hst2','Room cleaning','CL1',true);
INSERT INTO complaints VALUES('cb05','105','CP','B101','hst1','Chair broken','CP1',true);
INSERT INTO complaints VALUES('cg01','114','LA','1216','LHA','Lan Port broken','LA1',false);
INSERT INTO complaints VALUES('cg02','116','EC','1312','LHC','Light not working','EC2',false);
```

TABLES:

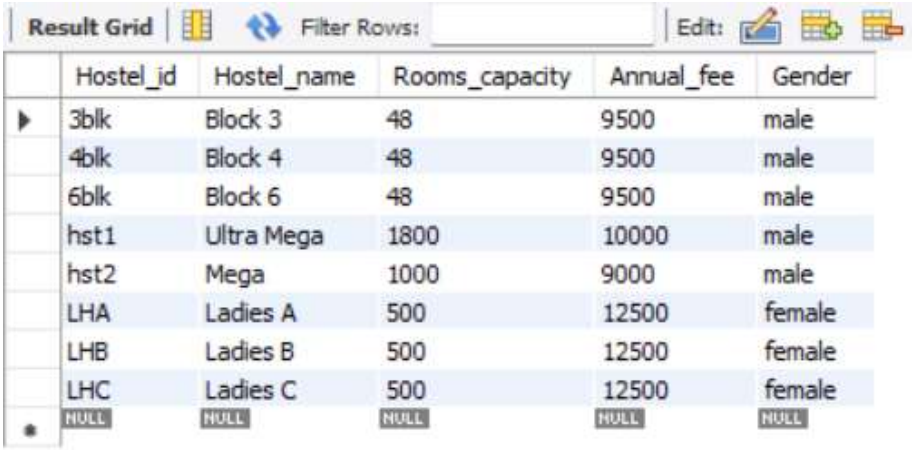
1.Students:



Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Stu_roll_no	Stu_name	Stu_dept	Stu_ph_no	Email	Gender	Stu_year	Password
100	Abhinay Challa	EEE	9876543210	ac@gmail.com	male	2	password123
101	Nikhil Boob	EEE	9638520741	nb@gmail.com	male	2	qwerty123
102	Vignesh Bejugam	EEE	9517418263	vb@gmail.com	male	2	asdf123
103	Kushpal Singh	CSE	7896541230	ks@gmail.com	male	3	ksbr
104	Krishna K V	MED	8529637410	kvksc@gmail.com	male	2	kvkscmed
105	Rajasekhar k	CED	6985741230	rk@gmail.com	male	4	lambu
106	Revanth Itte	EEE	8625147963	riit@gmail.com	male	4	iitrpr
107	Ravichandra k	CSE	7569284162	rck@gmail.com	male	3	ravipuli
108	Roshan kumar	ECE	8526314925	ark@gmail.com	male	4	arkab
109	Vinod konda	MME	7412566902	kv@gmail.com	male	3	vkks
110	Preetham P	BT	8562149003	pp@gmail.com	male	2	ppandiri
111	Rishik YS	Chem	6521493335	ysr@gmail.com	male	4	ysr69
112	Sree Harshitha	MED	7569819555	sh@gmail.com	female	2	csh18
113	Sravani T	BT	8526331454	st@gmail.com	female	4	tsravs
114	Madhavi P	Chem	7895412630	mp@gmail.com	female	3	mpcamp
115	Vaishnavi k	MED	8523600142	vkv@gmail.com	female	3	kvsv10
116	Priyanka R	MME	7852001414	pri@gmail.com	female	2	priyar45
117	Varshini B	ECE	9636985258	varb@gmail.com	female	2	varshaa
118	Irfan M	CED	9632541086	irfm@gmail.com	male	2	mdirfan786
119	Naveen NS	CSE	8500102030	nss@gmail.com	male	2	naveensir
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

2.Hostel:



Result Grid | Filter Rows: | Edit:

Hostel_id	Hostel_name	Rooms_capacity	Annual_fee	Gender
3blk	Block 3	48	9500	male
4blk	Block 4	48	9500	male
6blk	Block 6	48	9500	male
hst1	Ultra Mega	1800	10000	male
hst2	Mega	1000	9000	male
LHA	Ladies A	500	12500	female
LHB	Ladies B	500	12500	female
LHC	Ladies C	500	12500	female
NULL	NULL	NULL	NULL	NULL

3.Room:

Result Grid | Filter Rows:

Room_no	Hostel_id	Capacity	Status
1216	LHA	2	1
1312	LHC	3	1
1418	LHC	3	0
2345	hst2	2	1
3104	3blk	3	1
3117	LHC	3	1
3225	hst2	2	1
3232	LHA	2	0
4307	4blk	3	1
6212	6blk	3	0
6304	6blk	3	0
8808	LHB	2	1
A305	hst1	2	1
B101	hst1	2	1
B106	hst1	2	0
NULL	NULL	NULL	NULL

ROOM 1 ×

4.Work:

Result Grid | Filter Rows:

Work_dept_id	Dept_name
CL	Cleaning
CP	Carpentry
EC	Electric
LA	Lan
PB	Plumber
NULL	NULL

work 2 ×

5.Workers:

Result Grid | Filter Rows: | Edit: | Export/Import:

Worker_id	Worker_name	Worker_ph_no	Work_dept_id	Active	Complaints_resolved
CL1	Ramu	8521436259	CL	1	14
CL2	Shreyas	9558471114	CL	1	17
CP1	Mukesh	7895741826	CP	1	8
EC1	Suresh	7469258145	EC	0	16
EC2	Sharma	9625147836	EC	1	25
LA1	Rakesh	6522415786	LA	1	12
PB1	Ramesh	8523695147	PB	1	10
PB2	Ambani	9598362145	PB	0	15
NULL	NULL	NULL	NULL	NULL	NULL

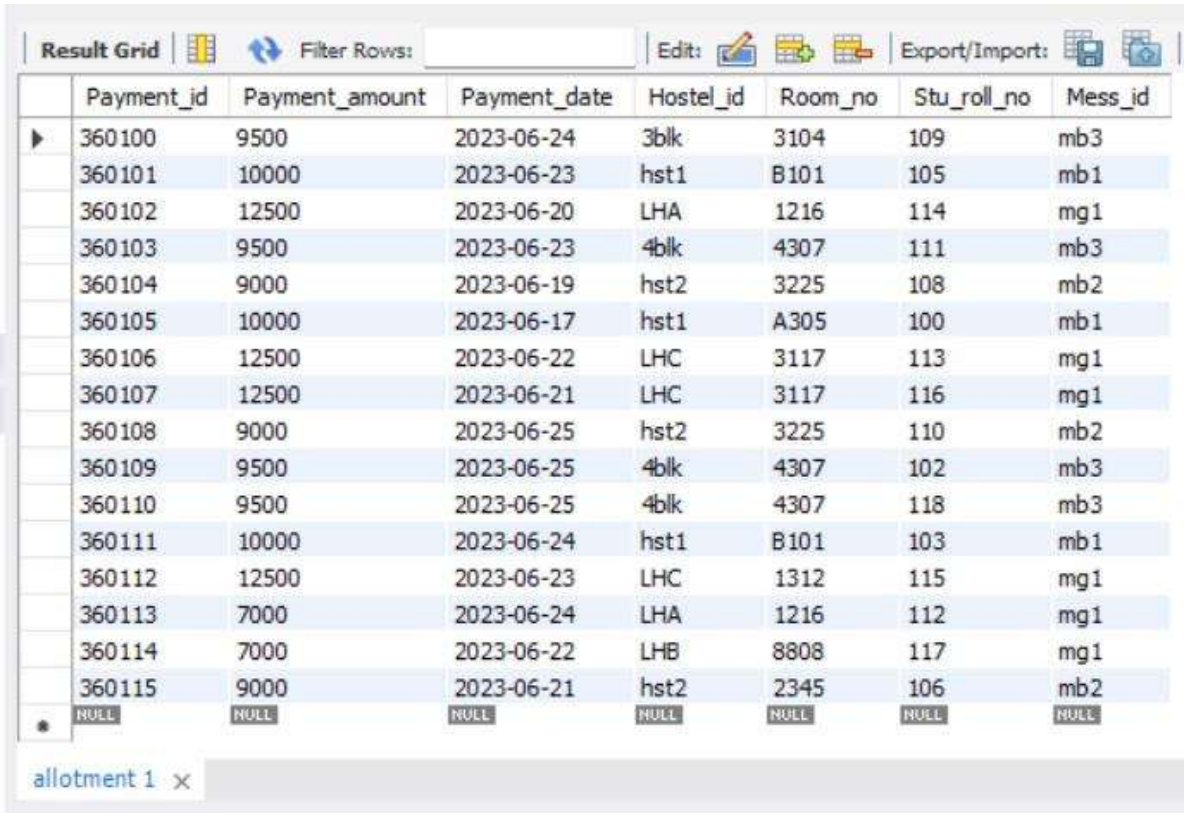
workers 2 ×

6.Mess:

Result Grid | Filter Rows: | Edit:

Mess_id	Mess_name	Per_day_cost	Mess_incharge	Contractor
mb1	IFCA	115	Dr.Kishore	Suresh
mb2	IFCB	115	Dr.Raghu	Arun
mb3	IFCC	115	Dr.Yousuf	Srikanth
mg1	IFCG	115	Dr.Vennela	Sujatha
NULL	NULL	NULL	NULL	NULL

7.Allotment:

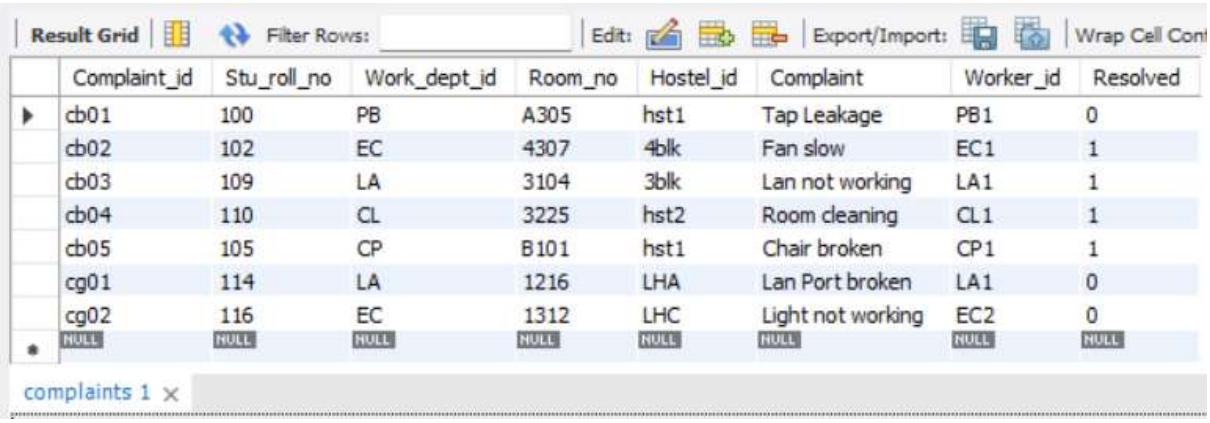


Result Grid | Filter Rows: | Edit: | Export/Import:

Payment_id	Payment_amount	Payment_date	Hostel_id	Room_no	Stu_roll_no	Mess_id
360100	9500	2023-06-24	3blk	3104	109	mb3
360101	10000	2023-06-23	hst1	B101	105	mb1
360102	12500	2023-06-20	LHA	1216	114	mg1
360103	9500	2023-06-23	4blk	4307	111	mb3
360104	9000	2023-06-19	hst2	3225	108	mb2
360105	10000	2023-06-17	hst1	A305	100	mb1
360106	12500	2023-06-22	LHC	3117	113	mg1
360107	12500	2023-06-21	LHC	3117	116	mg1
360108	9000	2023-06-25	hst2	3225	110	mb2
360109	9500	2023-06-25	4blk	4307	102	mb3
360110	9500	2023-06-25	4blk	4307	118	mb3
360111	10000	2023-06-24	hst1	B101	103	mb1
360112	12500	2023-06-23	LHC	1312	115	mg1
360113	7000	2023-06-24	LHA	1216	112	mg1
360114	7000	2023-06-22	LHB	8808	117	mg1
360115	9000	2023-06-21	hst2	2345	106	mb2
NULL	NULL	NULL	NULL	NULL	NULL	NULL

allotment 1 ×

8.Compliants:



Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Cont

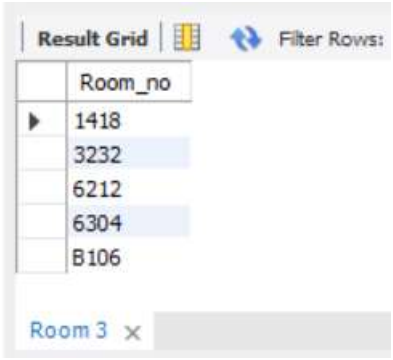
Complaint_id	Stu_roll_no	Work_dept_id	Room_no	Hostel_id	Complaint	Worker_id	Resolved
cb01	100	PB	A305	hst1	Tap Leakage	PB1	0
cb02	102	EC	4307	4blk	Fan slow	EC1	1
cb03	109	LA	3104	3blk	Lan not working	LA1	1
cb04	110	CL	3225	hst2	Room cleaning	CL1	1
cb05	105	CP	B101	hst1	Chair broken	CP1	1
cg01	114	LA	1216	LHA	Lan Port broken	LA1	0
cg02	116	EC	1312	LHC	Light not working	EC2	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

complaints 1 ×

QUERIES:

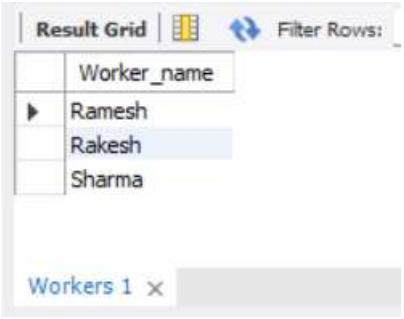
1.Display all vacant rooms.

```
select Room_no from Room where Status=false;
```



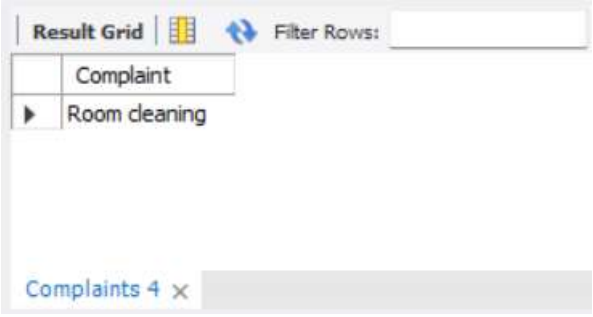
2.Display all the workers' names who have pending queries.

```
select Worker_name from Workers where Worker_id In
(select Worker_id from Complaints where Resolved = false);
```



3.Display the complaints raised by the student named 'Preetham P'.

```
select Complaint from Complaints where Stu_roll_no In
(select Stu_roll_no from Students where Stu_name='Preetham P');
```



4.Display the names of all the student who have not been allotted any room.

```
select Stu_name from Students where Stu_roll_no Not IN
(select Stu_roll_no from Allotment);
```