

DBMS PROJECT

TITLE: STUDENT FEES MANAGEMENT SYSTEM

SUBMITTED BY

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SUBMITTED TO

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VIT[®]
UNIVERSITY
(Estd. u/s 3 of UGC Act 1956)

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1. INTRODUCTION:

It is one of the critical processes of a college. Fees management system has a problem to note the records of many students' fees at time. If student pay his/her fees it could access more time to entry the fees details and also if we want to know the particular person fees list it hard to display the full details of fees list. Students are wait in queue to pay their special fees, tuition fees, etc of that college manage fees required. The main problem is to display the particular student record with all kind of details like student name, reg no, course , address. When classes commence date, date of paid, signatures etc all will noted the particular person it is also a problem.

This system mainly reduces the work time and it is easy to maintain the records for a longer time than hand written records. The students can check details by just entering his/her reg no or name no need to search all the records of the students. Student can easily know the pending of fees with the last date. This system useful to save and maintain and calculate balance fees collected from student. Here students can pay fees easily .This system can easily view only information related to their own fee for student and parents

2. PROJECT SCOPE (IN FUTURE):

Fees management system aims the automation of the following processes:

This system mainly reduces the work time and it is easy to maintain the records for a longer time than hand written records. The students can check details by just entering his/her reg no or name no need to search all the records of the students. Student can easily know the pending of fees with the last date. This system useful to save and maintain and calculate balance fees collected from student. Here students can pay fees easily .This system can easily view only information related to their own fee for student and parents.

3. KEYCONTACTS AND STAKEHOLDER:

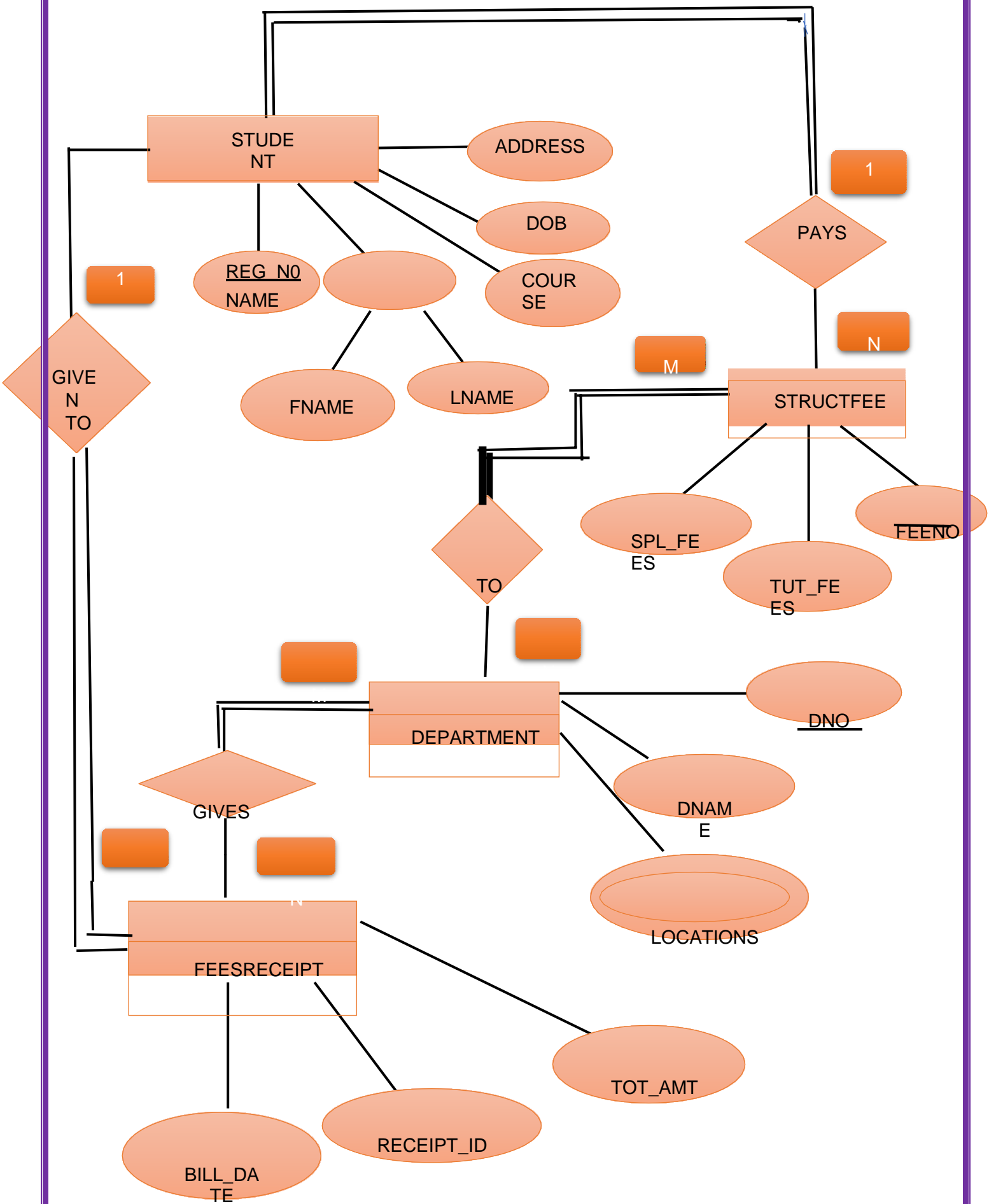
Registration number	Name	course
19BCS0004	C.BALAJI.	Bsc(cs)
19BCS0009	A.NAVEEN.	Bsc(cs)
19BCS0012	G.NITHISH.	Bsc(cs)

4. PROJECT RESOURCE REQUIREMENTS:

SOFTWARE RESOURCE REQUIREMENTS

- Windows 10
- Xampp
- Mysql(commandprompt)

5. ER DIAGRAM:



6. TABLES AND CONSTRAINTS:

TABLE NAME: STUDENT

ATTRIBUTE	DATATYPE	CONSTRAINTS
REG_NO	VARCHAR(10)	NOT NULL PRIMARY KEY
FNAME	CHAR(20)	DEFAULT NULL
LNAME	CHAR(10)	DEFAULT NULL
ADDRESS	VARCHAR(50)	DEFAULT NULL
DNO	INT	FOREIGN KEY REFERENCES(DEPARTMENT)
COURSE	CHAR(30)	DEFAULT NULL
DOB	INT(30)	DEFAULT NULL

TABLE NAME: DEPARTMENT

ATTRIBUTE	DATATYPE	CONSTRAINTS
DNO	INT	PRIMARY KEY(NOT NULL)
DNAME	CHAR(30)	DEFAULT NULL

TABLE NAME: DEPARTMENT_LOCATIONS

ATTRIBUTE	DATATYPE	CONSTRAINTS
DNO	INT	FOREIGN KEY REFERENCES(DEPARTMENT)
DLOC	CHAR(30)	DEFAULT NULL

TABLE NAME: STRUCTFEE

ATTRIBUTE	DATATYPE	CONSTRAINTS
FEENO	INT(20)	PRIMARY KEY NOT NULL
TUT_FEES	INT(20)	DEAFULT NULL
SPL_FEES	INT(20)	DEFAULT NULL
REG_NO	VARCHAR(10)	FOREIGN KEY REFERENCES(STUDENT)
DNO	INT	FOREIGN KEY REFERENCES(DEPARTMENT)

TABLE NAME: RECEIPT

ATTRIBUTE	DATATYPE	CONSTRAINTS
RECEIPT_ID	VARCHAR(20)	PRIMARY KEY NOT NULL
BILL_DATE	INT(20)	DEFAULT NULL
TOTAMT	INT(30)	DEFAULT NULL
REG_NO	VARCHAR(10)	FOREIGN KEY REFERENCES(STUDENT)
DNO	INT	FOREIGN KEY REFERENCES(DEPARTMENT)

7. QUERIES AND SCREENSHOT:

Student table:

Creation:

```
mysql> create table student(  
-> reg_no varchar(10) not null primary key,  
-> fname char(20),  
-> lname char(10),  
-> address varchar(50),  
-> dob int(30),  
-> dno int,  
-> course char(30),  
-> foreign key(dno) references department(dno));  
Query OK, 0 rows affected (0.11 sec)
```

```
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
reg_no	varchar(10)	NO	PRI	NULL	
fname	char(20)	YES		NULL	
lname	char(10)	YES		NULL	
address	varchar(50)	YES		NULL	
dob	int(30)	YES		NULL	
dno	int(11)	YES	MUL	NULL	
course	char(30)	YES		NULL	

7 rows in set (0.01 sec)

Insertion:

```
mysql> insert into student values('17BCS0097','MANJU','SRI','67 DV STREET KANGEYANALLUR','18/02/2000','103','BCS');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('17BCS0021','MONI','MINI','28 ANNA STREET PALMENER','27/12/1999','103','BCS');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('15BBE0001','BALA','MURUGAN','18 DURAI STREET MADHANURR VELLORE','27/10/1997','104','BBE');  
Query OK, 1 row affected, 1 warning (0.08 sec)  
  
mysql> insert into student values('16BBE0048','PRIYA','BHATHRA','21 VINUTH STREET CHENNAI','12/04/1998','104','BBE');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('17BBE0091','MANISH','YADAV','101 KARPITH STREET ANDHRA','22/04/1999','104','ECE');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('15ECE0091','KANI','MOZHI','31 DIKSHITH NAGAR VELLORE','02/03/1997','105','ECE(1)');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('15BAM0007','NAMMAN','LIANI','22 KALITHKOIYA NAGAR KOLKATA','12/03/1996','106','BAM');  
Query OK, 1 row affected, 1 warning (0.07 sec)  
  
mysql> insert into student values('17BHM0025','DUTTA','MADDY','10 MANPITH NAGAR MAHARASHTRA','02/04/2000','107','BHM');  
Query OK, 1 row affected, 1 warning (0.08 sec)  
  
mysql> insert into student values('17MSBI0082','PRAJIN','PADHMA','24 MITHUN NAGAR SALEM','01/07/1996','108','MSBI');  
Query OK, 1 row affected, 1 warning (0.08 sec)  
  
mysql> insert into student values('15MCA0096','VINAI','MITHUN','10TH KAINSH STREET MADURAI','10/10/1995','109','MCA');  
Query OK, 1 row affected, 1 warning (0.08 sec)  
  
mysql> insert into student values('16MBA0002','VETRI','VINASH','21TH BHARATHI STREET ANDHRA','11/12/1998','110','MBA');  
Query OK, 1 row affected, 1 warning (0.07 sec)
```



```
mysql> select*from student;
```

reg_no	fname	lname	address	dob	dno	course
15BAM0007	NAMMAN	LIANI	22 KALITHKOIYA NAGAR KOLKATA	12	106	BAM
15BBA0028	ANU	RAGAV	35 BAKRITH NAGAR CHENNAI	25	101	BBA
15BBA0081	DIVYA	BHARATHI	44 KUMARAPPANAGAR VELORE	12	101	BBA
15BBA0109	PRIYA	PRANAV	21 KRIDH PRIXI KOLKATA	19	101	BBA
15BBE0001	BALA	MURUGAN	18 DURAI STREET MADHANURR VELLORE	27	104	BBE
15ECE0091	KANI	MOZHI	31 DIKSHITH NAGAR VELLORE	2	105	ECE(1)
15MCA0096	VINAI	MITHUN	10TH KAINSH STREET MADURAI	10	109	MCA
16BBE0048	PRIYA	BHATHRA	21 VINUTH STREET CHENNAI	12	104	BBE
16BCA0012	KRISHIKA	HARSHINI	32 BAKIYA NAGAR VELORE	12	102	BCA
16BCA0056	DIVYAA	DHARSHINI	14TH SMRITHISTREET BELGAUM	22	102	BCA
16BCA0109	RUPHANKAR	KILANI	20TH DIRMATHINSTREET MAHARASHTRA	30	102	BCA
16MBA0002	VETRI	VINASH	21TH BHARATHI STREET ANDHRA	11	110	MBA
17BBE0091	MANISH	YADAV	101 KARPITH STREET ANDHRA	22	104	ECE
17BCS0021	MONI	MINI	28 ANNA STREET PALMENER	27	103	BCS
17BCS0081	BANU	PRIYA	76 BONEMILLSITE VELLORE	2	103	BCS
17BCS0097	MANJU	SRI	67 DV STREET KANGEYANALLUR	18	103	BCS
17BHM0025	DUTTA	MADDY	10 MAMPITH NAGAR MAHARASHTRA	2	107	BHM
17MSBI0082	PRAJIN	PADHMA	24 MITHUN NAGAR SALEM	1	108	MSBI

```
18 rows in set (0.00 sec)
```

Department table:

Creation:

```
mysql> create table department(dno int not null primary key,dname char(30));
Query OK, 0 rows affected (0.16 sec)
```

```
mysql> desc department;
```

Field	Type	Null	Key	Default	Extra
dno	int(11)	NO	PRI	NULL	
dname	char(30)	YES		NULL	

```
2 rows in set (0.01 sec)
```

Insertion:

```
ca: Command Prompt - mysql -u root -p -h localhost
Query OK, 1 row affected (0.06 sec)

mysql> insert into department values(101,'scse');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department values(102,'scutin');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department values(104,'sense');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department values(105,'turtin');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department values(106,'scain');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department values(107,'schium');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department values(108,'scuttle');
Query OK, 1 row affected (0.06 sec)

mysql> insert into department values(109,'creatin');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department values(110,'liopen');
Query OK, 1 row affected (0.08 sec)

mysql> select*from department;
+-----+-----+
| dno | dname |
+-----+-----+
| 101 | scse  |
| 102 | scutin|
| 103 | scvin |
| 104 | sense |
| 105 | turtin|
| 106 | scain |
| 107 | schium|
| 108 | scuttle|
| 109 | creatin|
| 110 | liopen|
+-----+-----+
```

DEPT_LOCATIONS

Creation:

```
mysql> create table department_locations(
-> dno int,
-> dloc char(30),
-> foreign key(dno) references department(dno));
Query OK, 0 rows affected (0.07 sec)
```

Insertion:

```
mysql> insert into department_locations values(101,'annaauditorium');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(102,'mgr block');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(103,'library');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department_locations values(104,'bharathistadium');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department_locations values(105,'shasthriblock');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(106,'fblock');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(107,'geanyblock');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(108,'chandraboseblock');
Query OK, 1 row affected (0.08 sec)

mysql> insert into department_locations values(109,'egf block');
Query OK, 1 row affected (0.07 sec)

mysql> insert into department_locations values(110,'mens block');
Query OK, 1 row affected (0.07 sec)
```

```
mysql> select*from department_locations;
+-----+-----+
| dno | dloc                |
+-----+-----+
| 101 | annaauditorium      |
| 102 | mgr block           |
| 103 | library             |
| 104 | bharathistadium     |
| 105 | shasthriblock       |
| 106 | fblock              |
| 107 | geanyblock          |
| 108 | chandraboseblock    |
| 109 | egf block           |
| 110 | mens block          |
+-----+-----+
10 rows in set (0.00 sec)
```

Structfee table:

Creation:

```
mysql> create table structfee(  
  -> feeno int(20)not null primary key,  
  -> tut_fees int(20),  
  -> spl_fees int(20),  
  -> reg_no varchar(10),  
  -> dno int(20),  
  -> foreign key(reg_no) references student(reg_no),  
  -> foreign key(dno) references department(dno));  
Query OK, 0 rows affected (0.15 sec)
```

```
mysql> desc structfee;
```

Field	Type	Null	Key	Default	Extra
feeno	int(20)	NO	PRI	NULL	
tut_fees	int(20)	YES		NULL	
spl_fees	int(20)	YES		NULL	
reg_no	varchar(10)	YES	MUL	NULL	
dno	int(20)	YES	MUL	NULL	

5 rows in set (0.10 sec)

Insertion:

```
mysql> insert into structfee values(1234510,40000,5000,'15BBA0028',101);  
Query OK, 1 row affected (0.07 sec)  
  
mysql> insert into structfee values(1234529,40000,5000,'15BBA0081',101);  
Query OK, 1 row affected (0.08 sec)  
  
mysql> insert into structfee values(1234622,40000,5000,'15BBA0109',101);  
Query OK, 1 row affected (0.08 sec)  
  
mysql> insert into structfee values(2345672,100000,50000,'15BBE0001',104);  
Query OK, 1 row affected (0.08 sec)  
  
mysql> insert into structfee values(23245671,80000,32000,'15ECE0091',105);  
Query OK, 1 row affected (0.03 sec)  
  
mysql> insert into structfee values(23342151,100000,11000,'15MCA0096',109);  
Query OK, 1 row affected (0.08 sec)  
  
mysql> insert into structfee values(43256781,70000,5000,'16BBE0048',104);  
Query OK, 1 row affected (0.07 sec)  
  
mysql> insert into structfee values(43256781,40000,6000,'16BCA0012',102);  
ERROR 1062 (23000): Duplicate entry '43256781' for key 'PRIMARY'  
mysql> insert into structfee values(43256741,40000,6000,'16BCA0012',102);  
Query OK, 1 row affected (0.07 sec)  
  
mysql> insert into structfee values(43256743,40000,6000,'16BCA0056',102);  
Query OK, 1 row affected (0.07 sec)  
  
mysql> insert into structfee values(43256323,40000,6000,'16BCA0109',102);  
Query OK, 1 row affected (0.07 sec)
```

```

mysql> insert into s_nuc:fee values(12aJ510,J0000,5000,'15BB 0028',101,;

mysql> insert into s_nuc:fee values(12S4529,40000,5000,'1SBB 0081',101,;
Query OK, 1 row affected (0.88 sec)

mysql> insert into s_nuc:fee values(12S4622,40000,5000,'1SBB 0109',101,;
due r,' CK, 1 row affected (8.88 sec)

mysql> insert into s_nuc:fee values(2S45672,100000,50000,'1SBBE0001',104,;
due r,' CK, 1 row affected (8.88 sec)

mysql> insert into s_nuc:fee values(2S245671,80000,52000,'1SECE0091',105,;
due r,' CK, 1 row affected (8.83 sec)

mysql> insert into s_nuc:fee values(2SS421S1,100000,11000,'151'CA0096',109,;
due r,' CK, 1 row affected (8.88 sec)

mysql> insert into s_nuc:fee values(4 23 5781,78000,3000,'1oBBE 8048',104 / j
due r,' CK, 1 row affected (8.87 sec)

mysql> insert into s_nuc:fee values(45256781,40000,6000,'16BCA0012',102,;
ERROR 1062 (23000): Duplicate entry '4%2?o781' for key 'PRI!AR"
mysql> insert into scrucfee values(45256741,40000,6000,'18BCA0012',102,;
Query OK, 1 row affected (0.07 sec)

mysql> insert into s_nuc:fee values(4S25674S,40000,6000,'18BCA00S8',102,;
Query OK, 1 row affected (0.87 sec)

mysql> insert into s_nuc:fee values(4S256S2S,40000,6000,'18BCA0109',102,;
due r,' CK, 1 row affected (8.87 sec)

```

```

mysql> select * from s_nuc:fee;

```

feeno	-u-_fees	spl_fees	neg_no	dno
252421	40000	S000	17BHM002S	107
1254092	20000	S000	1SB 1'0007	100
1254510	40000	S000	1SBBA0028	101
1254529	40000	S000	1SBBA0081	101
1234811	40000	S000	1SBBA0109	101
2345872	100000	S0000	1SBBE0001	104
23245871	80000	32000	1SECE0091	10?
23250313	100000	S0000	181"BA0002	110
23342151	100000	11000	1SMCA0090	109
432S0323	40000	0000	1oBCA0109	102
432S0741	40000	0000	1oBCA0012	102
432S0743	40000	0000	1oBCA00S0	102
432S0781	70000	S000	1oBBE0048	104
232411121	100000	95000	17MSBI0082	108
232445453	40000	S000	17BCS0097	103
2324S0323	100000	S0000	17BBE0091	104
2324S04S3	40000	S000	17BCS0021	103
2147483047	40000	S000	17BCS0081	103

```

18 rows in set (0.00 sec)

```

Receipt table:

Creation:

```
mysql> create table receipt(
-> receipt_id varchar(20) not null primary key,
-> bill_date int(20),
-> totamt int(30),
-> reg_no varchar(10),
-> dno int,
-> foreign key(reg_no) references student(reg_no),
-> foreign key(dno) references department(dno));
Query OK, 0 rows affected (0.14 sec)
```

```
mysql> desc receipt;
```

Field	Type	Null	Key	Default	Extra
receipt_id	varchar(20)	NO	PRI	NULL	
bill_date	int(20)	YES		NULL	
totamt	int(30)	YES		NULL	
reg_no	varchar(10)	YES	MUL	NULL	
dno	int(11)	YES	MUL	NULL	

5 rows in set (0.05 sec)

Insertion:

```
mysql> insert into receipt values('VABAM03216',12/10/2010,45000,'15BBA0028',101);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VABAM032236',11/03/2010,45000,'15BBA0081',101);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VABAM032136',11/04/2010,45000,'15BBA0081',101);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VABBE042136',18/05/2010,150000,'15BBE0001',104);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VAECE0421326',18/05/2010,112000,'15ECE0091',105);
Query OK, 1 row affected (0.08 sec)

mysql> insert into receipt values('VAMBA0413126',18/05/2010,250000,'16MBA0002',105);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VAMCA0413126',18/05/2010,111000,'15MCA0096',109);
Query OK, 1 row affected (0.04 sec)

mysql> insert into receipt values('VABCA413126',18/05/2010,46000,'16BCA0109',102);
Query OK, 1 row affected (0.05 sec)

mysql> insert into receipt values('VABCA417126',18/05/2010,46000,'16BCA0012',102);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VABCA417566',18/05/2010,46000,'16BCA0056',102);
Query OK, 1 row affected (0.08 sec)

mysql> insert into receipt values('VABBE4154566',18/05/2010,75000,'16BBE0048',104);
Query OK, 1 row affected (0.07 sec)

mysql> insert into receipt values('VAMSB1415566',18/05/2010,195000,'17MSBI0082',108);
Query OK, 1 row affected (0.04 sec)

mysql> insert into receipt values('VAMBCS415566',18/05/2010,45000,'17BCS0097',103);
Query OK, 1 row affected (0.08 sec)

mysql> insert into receipt values('VAMBCS416543',18/05/2010,45000,'17BCS0081',103);
Query OK, 1 row affected (0.07 sec)
```

```
mysql> select*from receipt;
```

receipt_id	bill_date	totamt	reg_no	dno
VABAM01456	0	25000	15BAM0007	106
VABAM032136	0	45000	15BBA0081	101
VABAM03216	0	45000	15BBA0028	101
VABAM032236	0	45000	15BBA0081	101
VABBE042136	0	150000	15BBE0001	104
VABBE4154566	0	75000	16BBE0048	104
VABCA413126	0	46000	16BCA0109	102
VABCA417126	0	46000	16BCA0012	102
VABCA417566	0	46000	16BCA0056	102
VABHM01855	0	45000	17BHM0025	107
VAECE0421326	0	112000	15ECE0091	105
VAMBA0413126	0	250000	16MBA0002	105
VAMBBE41643	0	150000	17BBE0091	104
VAMBCS415566	0	45000	17BCS0097	103
VAMBCS41643	0	45000	17BCS0021	103
VAMBCS416543	0	45000	17BCS0081	103
VAMCA0413126	0	111000	15MCA0096	109
VAMSB1415566	0	195000	17MSBI0082	108

```
18 rows in set (0.00 sec)
```

SELECT:

Display Regno='19BCS0081' details:

1. select fname,lname,course,address from student where reg_no='19BCS00081';

```
mysql> select fname,lname,course,address from student where reg_no='17BCS00081';
Empty set (0.05 sec)

mysql> select fname,lname,course,address from student where reg_no='17BCS0081';
```

fname	lname	course	address
BANU	PRIYA	BCS	76 BONEMILLSITE VELLORE

```
1 row in set (0.00 sec)
```

Display the regno and dno from structfee who paid the tut_fees more than 50000

2. select reg_no,dno from structfee where tut_fees>50000;

```
mysql> select reg_no,dno from structfee where tut_fees>50000;
+-----+-----+
| reg_no | dno |
+-----+-----+
| 15BBE0001 | 104 |
| 15ECE0091 | 105 |
| 16MBA0002 | 110 |
| 15MCA0096 | 109 |
| 16BBE0048 | 104 |
| 17MSBI0082 | 108 |
| 17BBE0091 | 104 |
+-----+-----+
7 rows in set (0.00 sec)
```

Display the details of the students using their course details

3. select fname,lname,address from student where course='BCS';

```
mysql> select fname,lname,address from student where course='BCS';
+-----+-----+-----+
| fname | lname | address |
+-----+-----+-----+
| MONI | MINI | 28 ANNA STREET PALMENER |
| BANU | PRIYA | 76 BONEMILLSITE VELLORE |
| MANJU | SRI | 67 DV STREET KANGEYANALLUR |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Update:

update student set lname='SHREE'where lname='SRI';


```
mysql> update student set lname='SHREE'where lname='SRI';
Query OK, 1 row affected (0.09 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select*from student;
```

reg_no	fname	lname	address	dob	dno	course
15BAM0007	NAMMAN	LIANI	22 KALITHKOIYA NAGAR KOLKATA	12	106	BAM
15BBA0028	ANU	RAGAV	35 BAKRITH NAGAR CHENNAI	25	101	BBA
15BBA0081	DIVYA	BHARATHI	44 KUMARAPPANAGAR VELORE	12	101	BBA
15BBA0109	PRIYA	PRANAV	21 KRIDH PRIXI KOLKATA	19	101	BBA
15BBE0001	BALA	MURUGAN	18 DURAI STREET MADHANURR VELLORE	27	104	BBE
15ECE0091	KANI	MOZHI	31 DIKSHITH NAGAR VELLORE	2	105	ECE(1)
15MCA0096	VINAI	MITHUN	10TH KAINSH STREET MADURAI	10	109	MCA
16BBE0048	PRIYA	BHATHRA	21 VINUTH STREET CHENNAI	12	104	BBE
16BCA0012	KRISHIKA	HARSHINI	32 BAKIYA NAGAR VELLORE	12	102	BCA
16BCA0056	DIVYAA	DHARSHINI	14TH SMRITHISTREET BELGAUM	22	102	BCA
16BCA0109	RUPHANKAR	KILANI	20TH DIRMATHINSTREET MAHARASHTRA	30	102	BCA
16MBA0002	VETRI	VINASH	21TH BHARATHI STREET ANDHRA	11	110	MBA
17BBE0091	MANISH	YADAV	101 KARPITH STREET ANDHRA	22	104	ECE
17BCS0021	MONI	MINI	28 ANNA STREET PALMENER	27	103	BCS
17BCS0081	BANU	PRIYA	76 BONEMILLSITE VELLORE	2	103	BCS
17BCS0097	MANJU	SHREE	67 DV STREET KANGAYANALLUR	18	103	BCS
17BHM0025	DUTTA	MADDY	10 MANPITH NAGAR MAHARASHTRA	2	107	BHM
17MSBI0082	PRAJIN	PADHMA	24 MITHUN NAGAR SALEM	1	108	MSBI

```
18 rows in set (0.00 sec)
```

Delete:

```
alter table receipt drop column bill_date;
```

```
alter table student drop column dob;
```

```
mysql> select*from receipt;
```

receipt_id	totamt	reg_no	dno
VABAM01456	25000	15BAM0007	106
VABAM032136	45000	15BBA0081	101
VABAM03216	45000	15BBA0028	101
VABAM032236	45000	15BBA0081	101
VABBE042136	150000	15BBE0001	104
VABBE4154566	75000	16BBE0048	104
VABCA413126	46000	16BCA0109	102
VABCA417126	46000	16BCA0012	102
VABCA417566	46000	16BCA0056	102
VABHM01855	45000	17BHM0025	107
VAECE0421326	112000	15ECE0091	105
VAMBA0413126	250000	16MBA0002	105
VAMBBE41643	150000	17BBE0091	104
VAMBCS415566	45000	17BCS0097	103
VAMBCS41643	45000	17BCS0021	103
VAMBCS416543	45000	17BCS0081	103
VAMCA0413126	111000	15MCA0096	109
VAMSBI415566	195000	17MSBI0082	108

```
18 rows in set (0.00 sec)

mysql> alter table student drop column dob;
Query OK, 18 rows affected (0.28 sec)
Records: 18  Duplicates: 0  Warnings: 0

mysql> select*from student;
```

reg_no	fname	lname	address	dno	course
15BAM0007	NAMMAN	LIANI	22 KALITHKOIYA NAGAR KOLKATA	106	BAM
15BBA0028	ANU	RAGAV	35 BAKRITH NAGAR CHENNAI	101	BBA
15BBA0081	DIVYA	BHARATHI	44 KUMARAPPANAGAR VELORE	101	BBA
15BBA0109	PRIYA	PRANAV	21 KRIDH PRIXI KOLKATA	101	BBA
15BBE0001	BALA	MURUGAN	18 DURAI STREET MADHANURR VELLORE	104	BBE
15ECE0091	KANI	MOZHI	31 DIKSHITH NAGAR VELLORE	105	ECE(1)
15MCA0096	VINAI	MITHUN	10TH KAINSH STREET MADURAI	109	MCA

Sql in-BUILT Functions:

select count(totamt)from receipt where totamt>70000;

```
mysql> select count(totamt)from receipt where totamt>70000;
+-----+
| count(totamt) |
+-----+
|              7 |
+-----+
1 row in set (0.02 sec)
```

select sum(totamt)from receipt;

```
mysql> select sum(totamt)from receipt;
+-----+
| sum(totamt) |
+-----+
|    1521000 |
+-----+
1 row in set (0.00 sec)
```

select avg(totamt)from receipt;

```
mysql> select avg(totamt)from receipt;
+-----+
| avg(totamt) |
+-----+
|  84500.0000 |
+-----+
1 row in set (0.00 sec)
```

select ceil(totamt)from receipt;

```
mysql> select ceil(totamt)from receipt;
+-----+
| ceil(totamt) |
+-----+
|          25000 |
|          45000 |
|          45000 |
|          45000 |
|         150000 |
|          75000 |
|          46000 |
|          46000 |
|          46000 |
|          45000 |
|         112000 |
|         250000 |
|         150000 |
|          45000 |
|          45000 |
|          45000 |
|         111000 |
|         195000 |
+-----+
18 rows in set (0.00 sec)
```

select max(totamt),min(totamt)from receipt;

select max(tut_fees),min(spl_fees)from structfee;

```
mysql> select max(totamt),min(totamt)from receipt;
+-----+-----+
| max(totamt) | min(totamt) |
+-----+-----+
|      250000 |      25000  |
+-----+-----+
1 row in set (0.05 sec)
```

```
mysql> select max(tut_fees),min(spl_fees)from structfee;
+-----+-----+
| max(tut_fees) | min(spl_fees) |
+-----+-----+
|      200000  |      5000    |
+-----+-----+
1 row in set (0.00 sec)
```

select lower(fname),(lname)from student;

```
mysql> select lower(fname),(lname)from student;
+-----+-----+
| lower(fname) | lname      |
+-----+-----+
| namman       | LIANI      |
| anu          | RAGAV      |
| divya        | BHARATHI   |
| priya        | PRANAV     |
| bala         | MURUGAN    |
| kani         | MOZHI      |
| vinai        | MITHUN     |
| priya        | BHATHRA    |
| krishika     | HARSHINI   |
| divyaa       | DHARSHINI  |
| ruphankar    | KILANI     |
| vetri        | VINASH     |
| manish       | YADAV      |
| moni         | MINI       |
| banu         | PRIYA      |
| manju        | SHREE      |
| dutta        | MADDY      |
| prajin       | PADHMA     |
+-----+-----+
18 rows in set (0.06 sec)
```

select upper(fname),(lname)from student where course='BCS';

```
mysql> select upper(fname),(lname)from student where course='BCS';
+-----+-----+
| upper(fname) | lname |
+-----+-----+
| MONI         | MINI  |
| BANU         | PRIYA |
| MANJU        | SHREE |
+-----+-----+
3 rows in set (0.00 sec)
```

select replace(lname,'EE','I')from student where lname='SHREE';

```
mysql> select replace(lname,'EE','I')from student where lname='SHREE';
+-----+
| replace(lname,'EE','I') |
+-----+
| SHRI                    |
+-----+
1 row in set (0.00 sec)
```

select instr('SHREE','R')from student where lname='SHREE';

```
mysql> select instr('SHREE','R')from student where lname='SHREE';
+-----+
| instr('SHREE','R') |
+-----+
| 3                  |
+-----+
1 row in set (0.00 sec)
```

select fname,lname,address from student order by fname asc;

```
mysql> select fname,lname,address from student order by fname asc;
+-----+-----+-----+
| fname | lname | address |
+-----+-----+-----+
| ANU   | RAGAV | 35 BAKRITH NAGAR CHENNAI |
| BALA  | MURUGAN | 18 DURAI STREET MADHANURR VELLORE |
| BANU  | PRIYA | 76 BONEMILLSITE VELLORE |
| DIVYA | BHARATHI | 44 KUMARAPPANAGAR VELLORE |
| DIVYAA | DHARSHINI | 14TH SMRITHISTREET BELGAUM |
| DUTTA | MADDY | 10 MANPITH NAGAR MAHARASHTRA |
| KANI  | MOZHI | 31 DIKSHITH NAGAR VELLORE |
| KRISHIKA | HARSHINI | 32 BAKIYA NAGAR VELLORE |
| MANISH | YADAV | 101 KARPITH STREET ANDHRA |
| MANJU | SHREE | 67 DV STREET KANGEYANALLUR |
| MONI  | MINI | 28 ANNA STREET PALMENER |
| NAMMAN | LIANI | 22 KALITHKOIYA NAGAR KOLKATA |
| PRAJIN | PADHMA | 24 MITHUN NAGAR SALEM |
| PRIYA | BHATHRA | 21 VINUTH STREET CHENNAI |
| PRIYA | PRANAV | 21 KRIDH PRIXI KOLKATA |
| RUPHANKAR | KILANI | 20TH DIRMATHINSTREET MAHARASHTRA |
| VETRI | VINASH | 21TH BHARATHI STREET ANDHRA |
| VINAI | MITHUN | 10TH KAINSH STREET MADURAI |
+-----+-----+-----+
18 rows in set (0.06 sec)
```

Join operation:

Select

structfee.feeno,structfee.tut_fees,structfee.spl_fees,structfee.reg_no,student.reg_no,student.fname,student.lname,student.address from structfee join student on structfee.reg_no=student.reg_no;

```
mysql> select structfee.feeno,structfee.tut_fees,structfee.spl_fees,structfee.reg_no,student.reg_no,student.fname,student.lname,student.address from structfee join student on structfee.reg_no=student.reg_no;
```

feeno	tut_fees	spl_fees	reg_no	reg_no	fname	lname	address
232421	40000	5000	178HM0025	178HM0025	DUTTA	MADDOY	10 MANPITH NAGAR MAHARASHTRA
1234092	20000	5000	158AM0007	158AM0007	NAWMAN	LIANI	22 KALITHKOIYA NAGAR KOLKATA
1234510	40000	5000	158BA0028	158BA0028	ANU	RAGAV	35 BAKRITH NAGAR CHENNAI
1234529	40000	5000	158BA0081	158BA0081	DIVYA	BHARATHI	44 KUMARAPPANAGAR VELLORE
1234622	40000	5000	158BA0109	158BA0109	PRIYA	PRANAV	21 KRIKH PRIXI KOLKATA
2345672	100000	50000	158BE0001	158BE0001	BALA	MURUGAN	18 DURAI STREET MADHANURR VELLORE
23245671	80000	32000	15ECE0091	15ECE0091	KANI	MOZHI	31 DIKSHITH NAGAR VELLORE
23256323	200000	50000	16MBA0002	16MBA0002	VETRI	VINASH	21TH BHARATHI STREET ANDHRA
23342151	100000	11000	15MCA0096	15MCA0096	VINAI	MITHUN	10TH KAINSH STREET MADURAI
43256323	40000	6000	16BCA0109	16BCA0109	RUPHANKAR	KILANI	20TH DIRMATHINSTREET MAHARASHTRA
43256741	40000	6000	16BCA0012	16BCA0012	KRISHIKA	HARSHINI	32 BAKIYA NAGAR VELLORE
43256743	40000	6000	16BCA0056	16BCA0056	DIVYAA	DHARSHINI	14TH SMRITHISTREET BELGAUM
43256781	70000	5000	16BBE0048	16BBE0048	PRIYA	BHATHRA	21 VINUTH STREET CHENNAI
23241121	100000	95000	17MSBI0082	17MSBI0082	PRAJIN	PADHMA	24 MITHUN NAGAR SALEM
232445453	40000	5000	17BCS0097	17BCS0097	MANJU	SHREE	67 DV STREET KANGEYANALLUR
232456323	100000	50000	17BBE0091	17BBE0091	MANISH	YADAV	101 KARPITH STREET ANDHRA
232456453	40000	5000	17BCS0021	17BCS0021	MONI	MINI	28 ANNA STREET PALMENER
2147483647	40000	5000	17BCS0081	17BCS0081	BANU	PRIYA	76 BONEHILLSITE VELLORE

18 rows in set (0.12 sec)

SUBQUERIES:

select fname,lname,reg_no from student where fname in(select fname from student where fname='moni');

```
mysql> select fname,lname,reg_no from student where fname in(select fname from student where fname='moni');
```

fname	lname	reg_no
MONI	MINI	17BCS0021

1 row in set (0.00 sec)

select receipt_id from receipt where totamt>(select avg(totamt)from receipt);

```
mysql> select receipt_id from receipt where totamt>(select avg(totamt)from receipt);
```

receipt_id
VABBE042136
VAECE0421326
VAMBA0413126
VAMBBE41643
VAMCA0413126
VAMSBI415566

6 rows in set (0.00 sec)

8. NORMALISATION OF EACH SCHEMA:

The following schema satisfies 1nf 2nf and 3nf
student

<u>Reg_no</u>	name	dob	address	course
---------------	------	-----	---------	--------

Department:

<u>Dno</u>	Dname
------------	-------

structFee:

<u>feeno</u>	Tut_fees	Spl_fees
--------------	----------	----------

Receipt:

<u>Receipt_id</u>	billdate	totamt
-------------------	----------	--------

Department_locations:

<u>dno</u>	dloc
------------	------

Student_receipt:

<u>Reg_no</u>	<u>Receipt_id</u>	Tot_amt
---------------	-------------------	---------

Student_fees:

Reg_no	feeno	Tut_fees
--------	-------	----------

9. WORK BREAK DOWN:

TEAM MEMBER (REGISTRATION NUMBER)	NAME	WORKASSIGNED
19BCS0009	A.NAVEEN	FUNCTIONALITY (queries) Creation table for Student and Department.
19BCS0012	G.NITHISH	FUNCTIONALITY (queries) Creation table for Receipt and ER Diagram for this Database.
19BCS0004	C.BALAJI	FUNCTIONALITY (queries) Creation table for Department_locations and Structfee.

