DBMS PROJECT

TITLE:

STUDENT FEES MANAGEMENT SYSTEM

SUBMITTEDBY

19BCS0012-G.NITHISH

19BCS0009- A.NAVEEN

19BCS0004- C.BALAJI

SUBMITTED TO

PROF. VANI.M.P

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 ANDSTAKEHOLDER:

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

4. PROJECT RESOURSE REQUIREMENTS

SOFTWARE RESOURCE REQUIREMENTS

- *Windows 10*
- *Xampp*
- *Mysql(commandprompt)*

5. ER DIAGRAM:

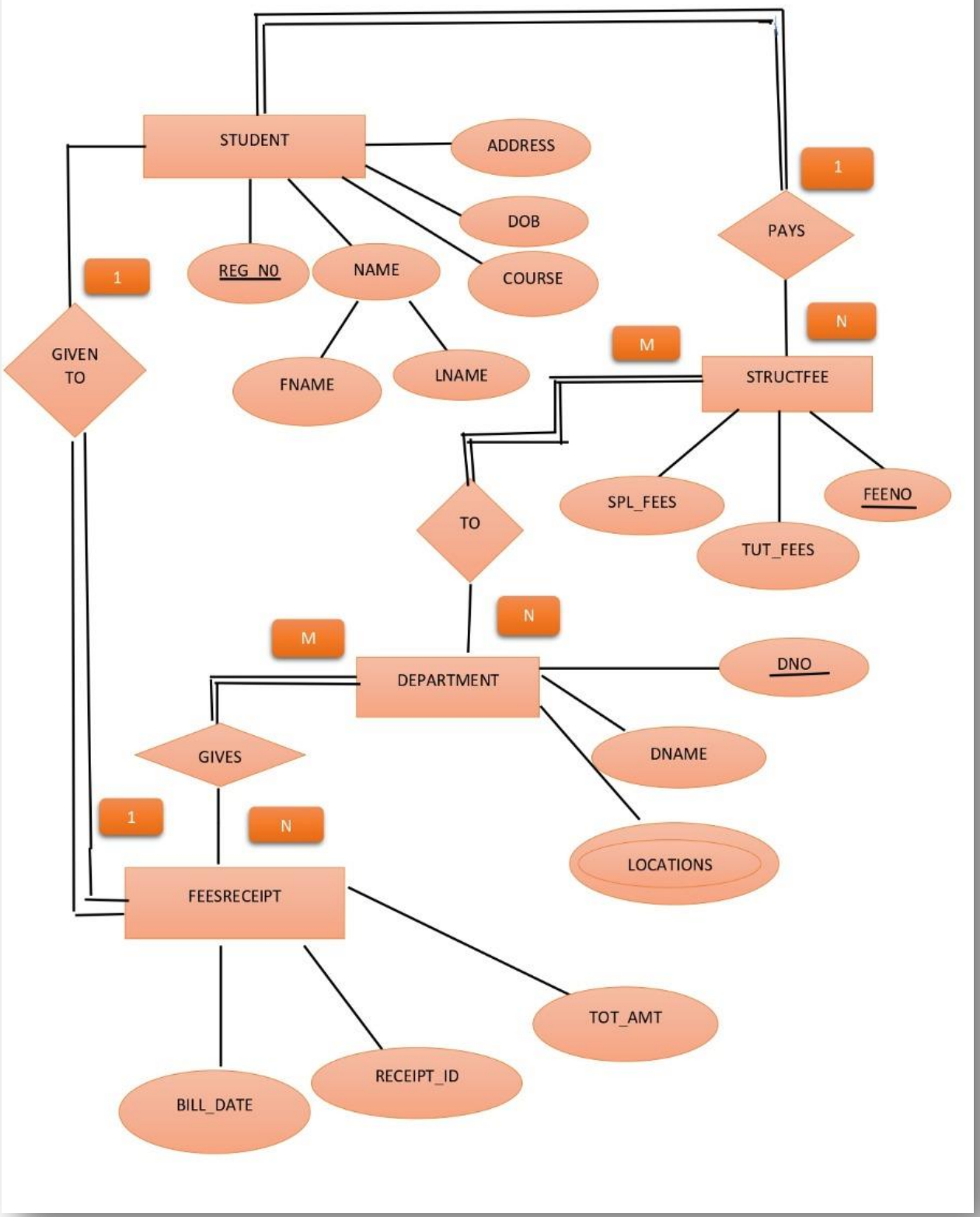
STUDENT
ADDRESS
DOB
REG_NO
NAME
COURSE
FNAME
LNAME
1
GIVEN TO
1
PAYS
N
M
STRUCTFEE
SPL_FEES
FEENO
TUT_FEES
TO
N
M
DEPARTMENT
DNO
DNAME
LOCATIONS
GIVES
1
N
FEESRECEIPT
TOT_AMT
RECEIPT_ID
BILL_DATE

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*

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 MANPITH 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:

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,'schiun');
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 | schiun  |
| 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)
```

```
mysql1>insen:in:os:nuc:feeva1ues‹12aJ510,J0000,5000,’15BB0028’,101,;
Query OK, 1 row affected (0.07 sec)

mysql>inser:in:os:ruc:feevalues‹12S4529,40000,5000,’1SBB0081’,101,;
QueryCK, 1 row a flew -ed‹ 0. 88 3ec

mysql>inser: in:o s:ruc:fee values‹12S4622,40000,5000,’1SBB 0109’,101,;
duer,' CK, 1 row a flew -ed‹' 8. 88 sec

mysql>inser: in:o s:ruc:feevalues‹2S45672,100000,50000,’1SBBE0001’,104,;
duer,' CK, 1 row a flew -ed‹' 8. 88 sec

mysql>inser: in:o s:ruc:feevalues‹2S245671,80000,52000,’1SECE0091’,105,;
duer,' CK , 1 row a flew -ed‹' 8. 83 set

m;sql>inser: in:o s:ru::feevalues{2SS421S1,100000,11000,’151'CA0096’,109,;
duer,' CK, 1 row a flew -ed‹' 8. 88 sec

m;sql>in3e r- In-o s-rue -fee . a1ues ‹ 4 23 0781, 78000, 3000, ' 1oBBE 8048 ' ,104 / j
due r,' cK, 1 row a flew -ed‹" 8. 87 sec

m;sql>inser: in:os-ruc:feevalues‹45256781,40000,6000,’16BCA0012’,102,;
ERRCR 10o2 ‹ 2300B}: Duplica-e en-ny’4%2?o781’fon<e; ’PRI!'AR"’
mysql>insertintoscruccfeevalues‹45256741,40000,6000,’18BCA0012’,102,; Query
CK, 1 roe affe::ed‹0.07 sec,.

mysql>inser: in:o s:ruc:feevalues‹4S25674S,40000,6000,’18BCA00S8’,102,;
Query CK, 1 roll a flew -ed‹' 0. 87 3ec

mysql>inser: in:o s:ruc:feevalues‹4S256S2S,40000,6000,’18BCA0109’,102,;
duer,' CK , 1 row a flew -ed‹' 8. 87 set
```

```
mysql› sele:-’fnom s-nu:-fee;

  feeno       -u-_fees   spl_fees   neg_no       dno

     252421      40000       S000   17BHM002S     107
    1254092      20000       S000   1SB l'0007    10o
    1254510      40000       S000   1SBBA0028     10]
    1254529      40000       S000   1SBBA0081     10]
    1234811      40000       S000   1SBBA0109     10]
    2345872     100000      S0000   1SBBE0001     104
   23245871      80000      32000   1SECE0091     10?
   2325o313     100000      S0000   18l"BA0002    110
   23342151     100000      11000   1SMCA009o     109
   432So323      40000       o000   1oBCA0109     102
   432So741      40000       o000   1oBCA0012     102
   432So743      40000       o000   1oBCA00So     102
   432So781      70000       S000   1oBBE0048     104
  232411121     100000      95000   17MSBI0082    108
  232445453      40000       S000   17BCS0097     103
  2324So323     100000      S0000   17BBE0091     104
  2324So4S3      40000       S000   17BCS0021     103
 2147483o47      40000       S000   17BCS0081     103

18 rous in se: ‹0.00sec,
```

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('VAMSBI415566',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 |
| VAMSBI415566 |         0 | 195000 | 17MSBI0082 |  108 |
+--------------+-----------+--------+------------+------+
18 rows in set (0.00 sec)
```

FILTRATION

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 wheretut_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 wherecourse='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'wherelname='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 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     | SHREE     | 67 DV STREET KANGEYANALLUR       |   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    |
```

Sqlin-BUILTFUNCTIONS:

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)
```

selectavg(totamt)fromreceipt;

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

select ceil(totamt)fromreceipt;

```
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)
```

selectinstr('SHREE','R')from student wherelname='SHREE';

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

selectfname,lname,address from student order by fnameasc;

```
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 VELORE            |
| DIVYAA    | DHARSHINI | 14TH SMRITHISTREET BELGAUM          |
| DUTTA     | MADDY     | 10 MANPITH NAGAR MAHARASHTRA        |
| KANI      | MOZHI     | 31 DIKSHITH NAGAR VELLORE           |
| KRISHIKA  | HARSHINI  | 32 BAKIYA NAGAR VELORE              |
| 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 | 17BHM0025 | 17BHM0025 | DUTTA     | MADDY     | 10 MANPITH NAGAR MAHARASHTRA      |
|  1234092 |    20000 |     5000 | 15BAM0007 | 15BAM0007 | NAMMAN    | LIANI     | 22 KALITHKOIYA NAGAR KOLKATA      |
|  1234510 |    40000 |     5000 | 15BBA0028 | 15BBA0028 | ANU       | RAGAV     | 35 BAKRITH NAGAR CHENNAI          |
|  1234529 |    40000 |     5000 | 15BBA0081 | 15BBA0081 | DIVYA     | BHARATHI  | 44 KUMARAPPANAGAR VELORE          |
|  1234622 |    40000 |     5000 | 15BBA0109 | 15BBA0109 | PRIYA     | PRANAV    | 21 KRIDH PRIXI KOLKATA            |
|  2345672 |   100000 |    50000 | 15BBE0001 | 15BBE0001 | 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 VELORE            |
| 43256743 |    40000 |     6000 | 16BCA0056 | 16BCA0056 | DIVYAA    | DHARSHINI | 14TH SMRITHISTREET BELGAUM        |
| 43256781 |    70000 |     5000 | 16BBE0048 | 16BBE0048 | PRIYA     | BHATHRA   | 21 VINUTH STREET CHENNAI          |
|232411121 |   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 BONEMILLSITE VELLORE           |
+----------+----------+----------+-----------+-----------+-----------+-----------+-----------------------------------+
18 rows in set (0.12 sec)
```

SUBQUERIES:

selectfname,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)
```

selectreceipt_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 EACHSCHEMA:

Thefollowingschemasatisfies1nf2nfand3nf student

Reg_no	name	dob	address	course

Department:

Dno	Dname

structFee:

feeno	Tut_fees	Spl_fees

Receipt:

Receipt_id	billdate	totamt

Department_locations:

dno	dloc

Student_receipt:

Reg_no	Receipt_id	Tot_amt

Student_fees:

Reg_no	feeno	Tut_fees

9. WORK BREAKDOWN:

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.

10.BENEFITS :

- ❖ Integrate Complete Fee Management.
- ❖ Easy online transaction.
- ❖ Handle Multiple Finance.
- ❖ An easy and safe fee payment system for parents.

11. CONCLUSION:

- *From this system we can conclude that it provides better fee management system and also lot of convince than the old system.*
- *This process is very fast data can be easily entered lot of time is also saved. It is very easy to understand and this program can be used anywhere based on requirement*
- *Fee management is one of the complex and tedious tasks to handle among multiple academic operations which actually requires automation.*
- *An education technology designed to hit the pain areas of the institutions, resolve them and strengthen institution to reach new heights.*