SCHOOL MANAGEMENT SYSTEM

MINIPROJECT

K. TAMILMANI

B. TECT(IT)

19ITR100

Objective & Scope

1.Objective:

- This is a XAMPP oriented application to access the information about the school, students, facilities etc.
- This application provides a latest update about the students information.
- Here administrator will manage the accounts of the student and faculties, makes the timetable, and upload the latest information about the school campus.
- It also provides support that a faculty can also check about his daily student information.
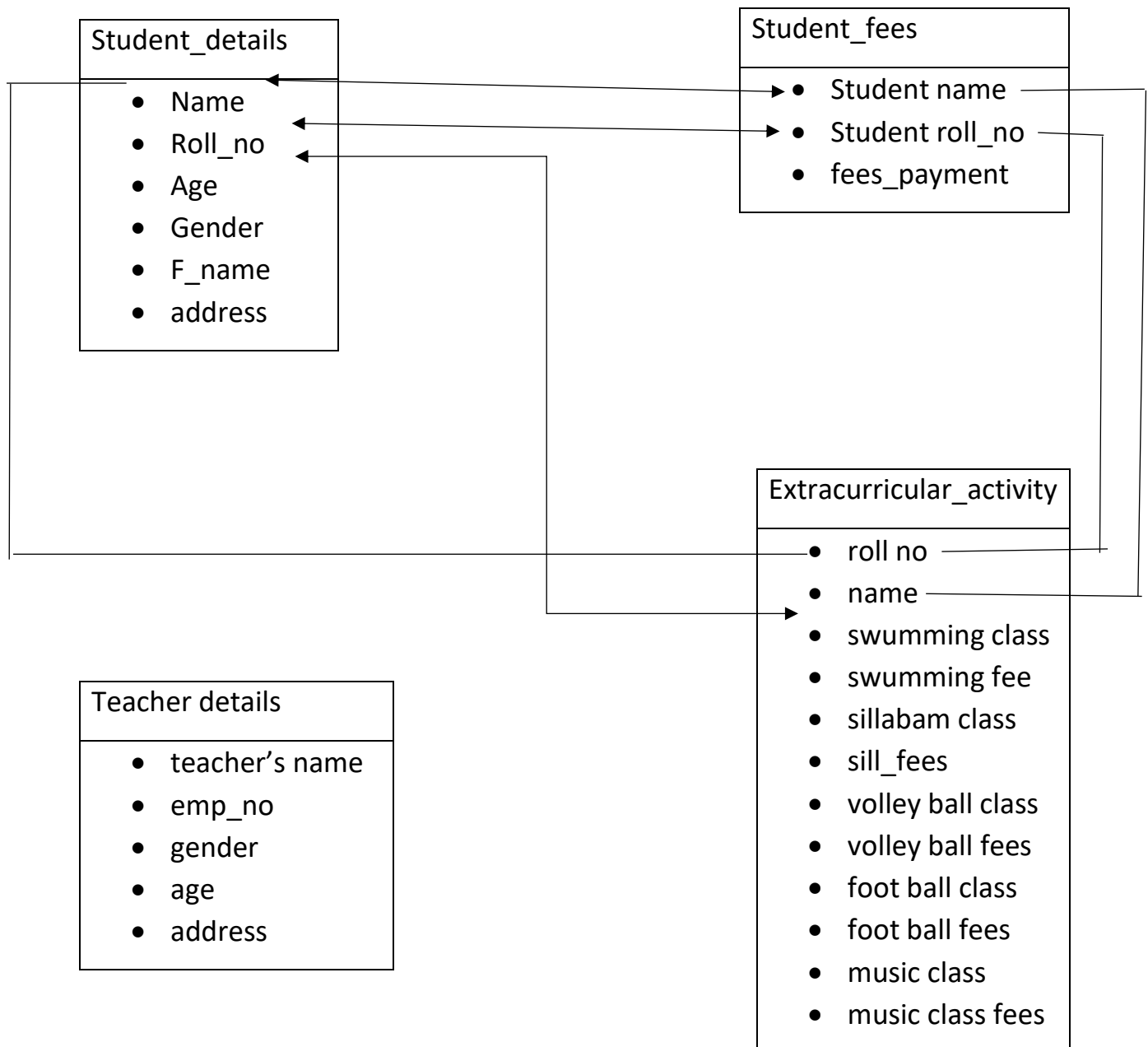
2.Scope:

- It produces exact information about student information.

- Easy access of student details.

- Easy updates of student details.

- Easy account for student payments.

- Less time is required.
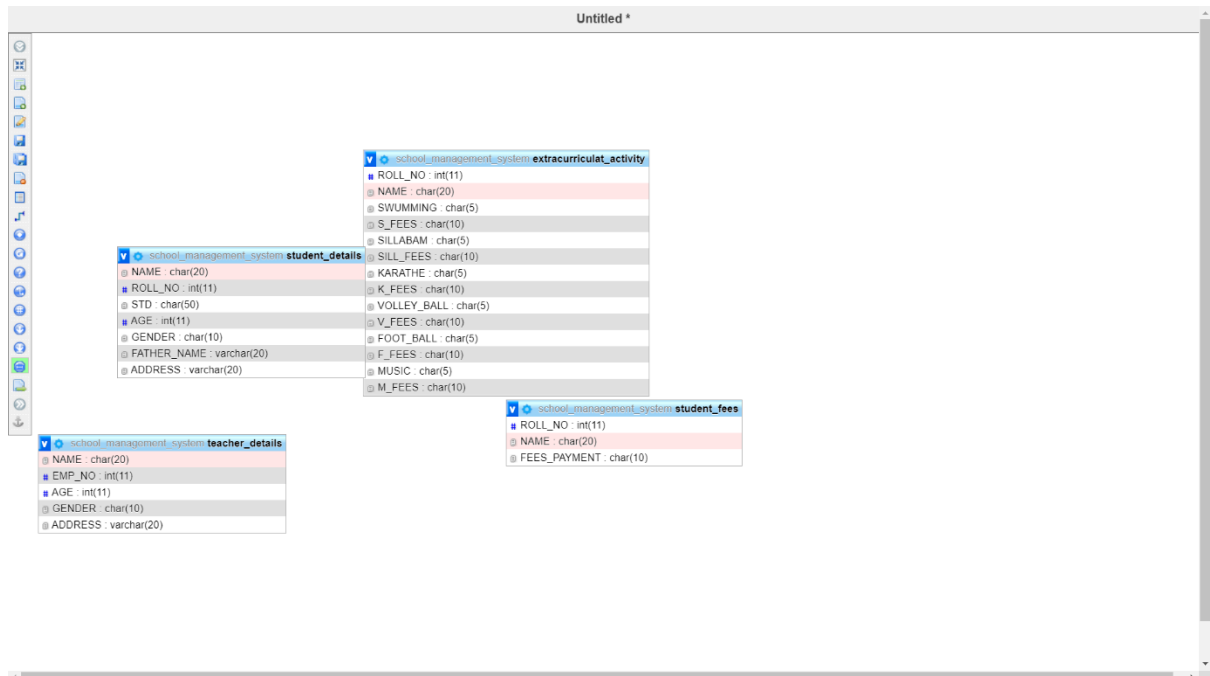
- Easy to know teacher information

PROJECT EXPLAINATION:

1. In this school management system have four tables i.e student_detail, teacher_detail, student_fees, extracurricular_activity.
2. Table student_details contain attributes
   - Student name (Foreign key)
   - Roll number (Foreign key)
   - Age
   - Gender
   - Father name
   - Address
3. Table teacher_details contain attributes
   - Teacher name
   - Employee number
   - Age
   - Gender
   - Address

4. Table student_fees contain attributes

   - Student roll number (Foreign key)
   - Student name
   - Fees payment

5. Table extracurricular_activity contain attributes

   - Student roll number
   - Student name
   - Swumming class
   - Swumming fees
   - Sillabam class
   - Sillabam fees
   - Volley ball class
   - Volley ball fees
   - Foot ball class
   - Foot ball fees
   - Music class
   - Music class fee

Class Diagram:

Student_details

- Name
- Roll_no
- Age
- Gender
- F_name
- address

Student_fees

- Student name
- Student roll_no
- fees_payment

Extracurricular_activity

- roll no
- name
- swumming class
- swumming fee
- sillabam class
- sill_fees
- volley ball class
- volley ball fees
- foot ball class
- foot ball fees
- music class
- music class fees

Teacher details

- teacher's name
- emp_no
- gender
- age
- address

MEMORY ALLOCTION FOR SCHOOL MANAGEMENT SYSTEM :

NUMBER OF TABLES USED:

BACK END:

1.Display the table called extracurricular activity.
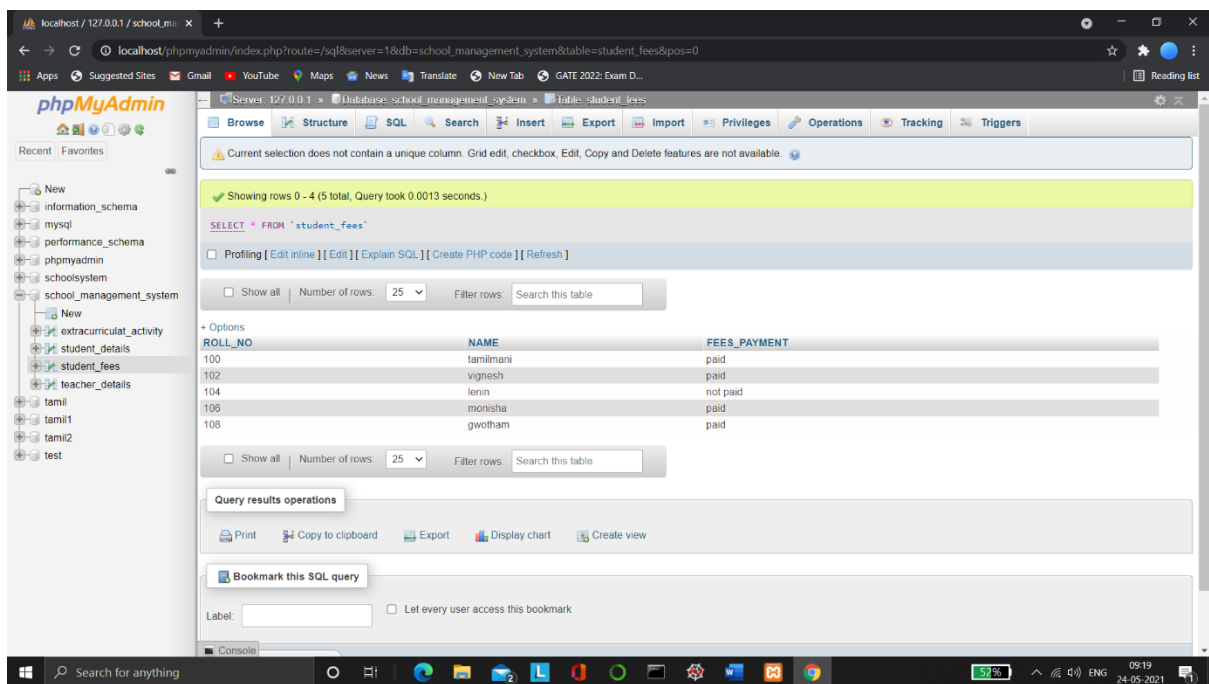
- In this screenshot display all the details in table extracurricular activity.

- It gives the information whether student is joined in extracurricular class or not.

- It also produces information about whether he/she paid fees for that class or not paid.

2.Display table called student details.
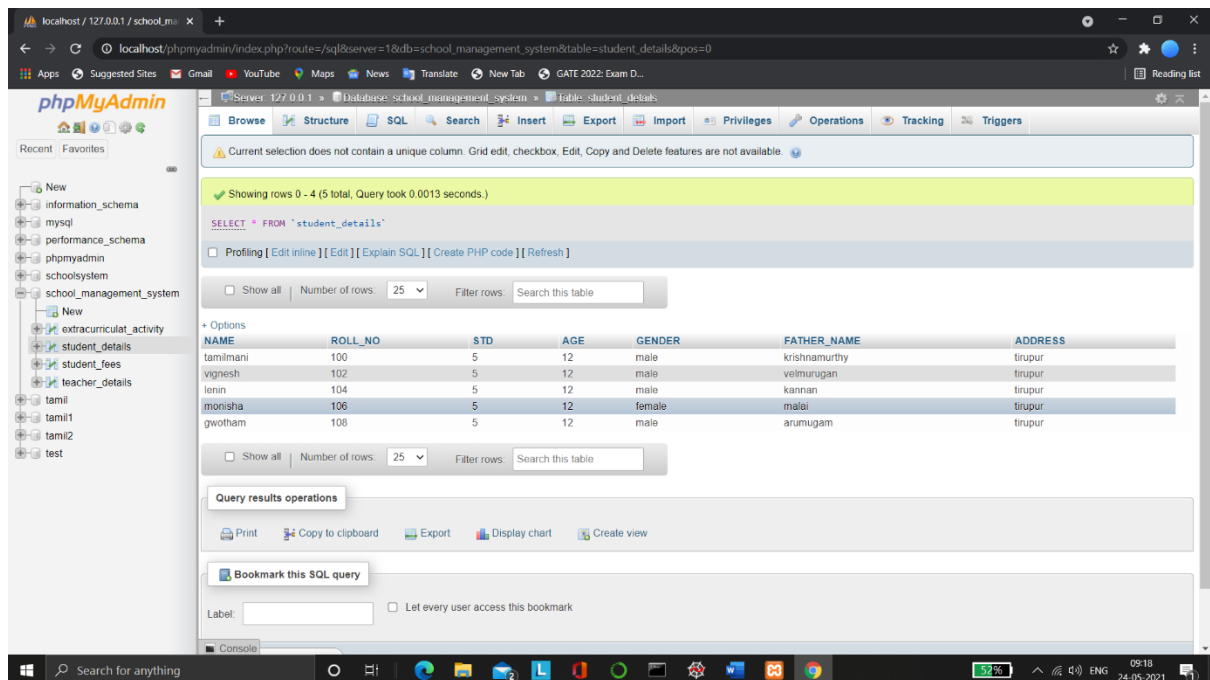
- From this screenshot, table student details display student details.

- Such as whether he/she paid academy fees or not

- And age, standard, gender, father name, address.

3.Display table called student fees:
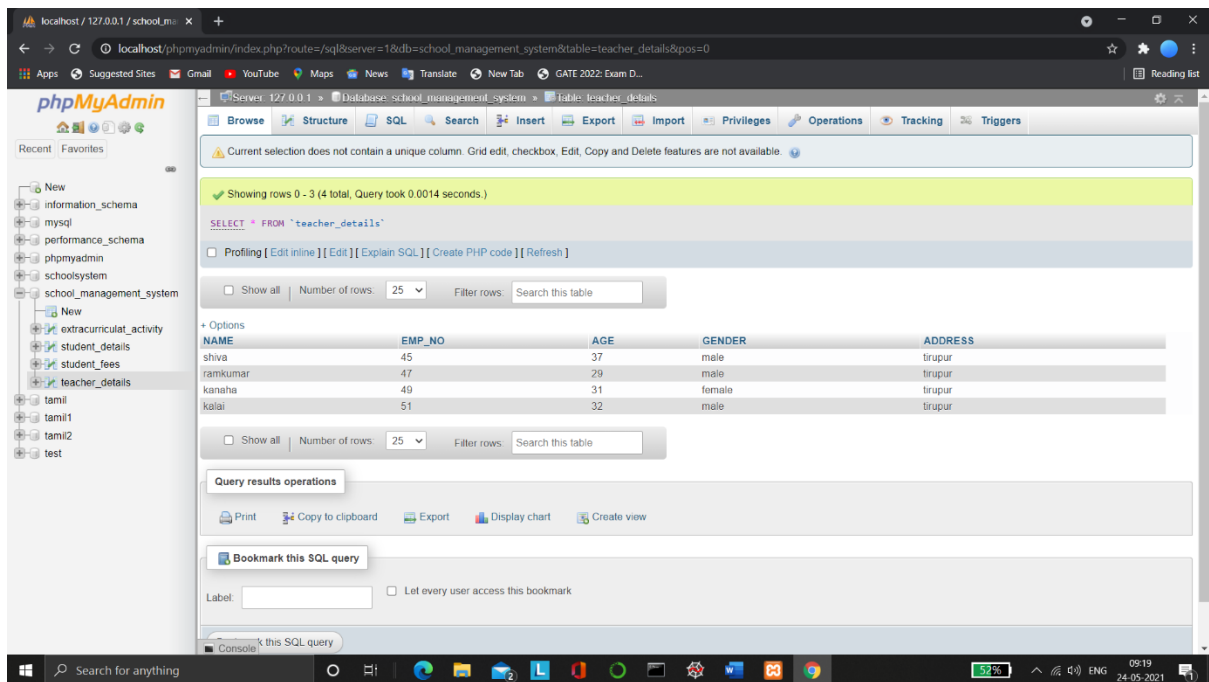
- From this table student fees, display the academic fees which student pay fees or not with their name and roll number.

4.Display table called teacher details:

- From this table teacher details display the teachers information along with their employee number, age, gender and address.

FRONT END:

Source code for this school management system:

PROGRAM:

import pymysql

from tabulate import tabulate

db=pymysql.connect(host="localhost",user="root",password="",database="school_manage ment_system")

cr=db.cursor()

sql="DROP TABLE IF EXISTS STUDENT_DETAILS"

cr.execute(sql)

sql="DROP TABLE IF EXISTS STUDENT_FEES"

cr.execute(sql)

sql="DROP TABLE IF EXISTS EXTRACURRICULAT_ACTIVITY"

cr.execute(sql)

sql="DROP TABLE IF EXISTS TEACHER_DETAILS "

cr.execute(sql)

sql="""CREATE TABLE STUDENT_DETAILS (

     NAME CHAR(20) ,

     ROLL_NO INTEGER,

     STD CHAR(50),

     AGE INT,

     GENDER CHAR(10),

     FATHER_NAME VARCHAR(20),

     ADDRESS VARCHAR(20))"""

```
cr.execute(sql);

sql="""CREATE TABLE TEACHER_DETAILS (

        NAME  CHAR(20) ,

        EMP_NO INTEGER,

        AGE INT,

        GENDER CHAR(10),

        ADDRESS VARCHAR(20))"""

cr.execute(sql);


cr.execute("""CREATE TABLE STUDENT_FEES (ROLL_NO INTEGER  ,NAME CHAR(20),
FEES_PAYMENT CHAR(10))""");


cr.execute("""CREATE TABLE EXTRACURRICULAT_ACTIVITY (ROLL_NO INTEGER  ,NAME
CHAR(20),

        SWUMMING CHAR(5), S_FEES CHAR(10),

        SILLABAM CHAR(5),SILL_FEES CHAR(10),

        KARATHE CHAR(5),K_FEES CHAR(10),

        VOLLEY_BALL CHAR(5),V_FEES CHAR(10),

        FOOT_BALL CHAR(5),F_FEES CHAR(10),

        MUSIC CHAR(5),M_FEES CHAR(10))""");


while True:

    print("1.insert student's details\n2.insert teacher's details\n3.update student's
details\n4.update teacher's details\n5.delete student's details\n6.delete teacher's
details\n7.display details\n8.Exit")

    ch=int(input("enter your choice: "))
```

```python
if(ch==1):
 name=input("enter student name:")
 roll_no=input("enter student roll_no:")
 std=int(input("enter standard:"))
 age=input("enter student age:")
 gender=input("enter student gender:")
 f_name=input("enter student's father name:")
 address=input("enter student address:")
 fees_payment = input("enter student's fees payment details(paid/not paid):")
 swumming=input("student is joined in summing class(yer/no):")
 s_fees=input("student is  summing class fees payment(paid/not paid):")
 karathe=input("student is joined in karathe class(yer/no):")
 k_fees=input("student is  summing class fees payment(paid/not paid):")
 sillambam=input("student is joined in sillabam class(yer/no):")
 sill_fees=input("student is  sillabam class fees payment(paid/not paid):")
 volley_ball=input("student is joined in valley ball(yer/no):")
 v_fees=input("student is  valley ball fees payment(paid/not paid):")
 foot_ball=input("student is joined in foot ball(yer/no):")
 f_fees=input("student is  foot ball fees payment(paid/not paid):")
 music=input("student is joined in music class(yer/no):")
 m_fees=input("student is  music class fees payment(paid/not paid):")


 cr.execute("""INSERT INTO  STUDENT_DETAILS( NAME,ROLL_NO ,STD,AGE,GENDER ,FATHER_NAME ,ADDRESS )
    VALUES (%s,%s,%s,%s,%s,%s,%s)""",(name,roll_no,std,age,gender,f_name,address));
 db.commit()
```

```python
        cr.execute("""INSERT INTO  STUDENT_FEES( ROLL_NO ,NAME,FEES_PAYMENT)
          VALUES (%s,%s,%s)""",(roll_no,name,fees_payment));
        db.commit()



        cr.execute("""INSERT INTO  EXTRACURRICULAT_ACTIVITY( ROLL_NO ,NAME,
SWUMMING , S_FEES ,

          SILLABAM,SILL_FEES,

          KARATHE ,K_FEES ,

          VOLLEY_BALL,V_FEES,

          FOOT_BALL ,F_FEES ,

          MUSIC ,M_FEES )

        VALUES
(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)""",(roll_no,name,swumming,s_fees,sillamb
am,sill_fees,karathe, k_fees,volley_ball,v_fees,foot_ball,f_fees,music, m_fees));
        db.commit()


      print("Sucessfully inserted");
   elif(ch==2):
     t_name=input("enter teacher name:")

     emp_no=input("enter teacher's employ number:")

     t_age=input("enter teacher age:")

     t_gender=input("enter teacher gender:")

     t_address=input("enter address:")

     cr.execute("""INSERT INTO  TEACHER_DETAILS( NAME,EMP_NO ,AGE,GENDER ,ADDRESS
)

     VALUES (%s,%s,%s,%s,%s)""",(t_name,emp_no,t_age,t_gender,t_address));
```

```
    db.commit()

    print("Sucessfully inserted");

  elif(ch==7):


    ql = "SELECT * FROM STUDENT_DETAILS"

    cr.execute(ql);

    result1=cr.fetchall();

    ql = "SELECT * FROM STUDENT_FEES"

    cr.execute(ql);

    result2=cr.fetchall();

    cr.execute( "SELECT * FROM EXTRACURRICULAT_ACTIVITY");

    result3=cr.fetchall();

    ql = "SELECT * FROM TEACHER_DETAILS"

    cr.execute(ql);

    result4=cr.fetchall();

print(tabulate(result1,headers=["NAME","ROLL_NO","STD","AGE","GENDER","FATHER_NA
ME","ADDRESS"]))

    print(tabulate(result4,headers=["NAME","EMP_NO","AGE","GENDER","ADDRESS"]))

    print(tabulate(result2,headers=["ROLL_NO","NAME","FEES_PAYMENT"]))

    print(tabulate(result3,headers=["ROLL_NO","NAME", "SWUMMING" ,"
S_FEES","SILLABAM","SILL_FEES"  , "KARATHE" ,"K_FEES" ,  "VOLLEY_BALL","V_FEES",
"FOOT_BALL ","F_FEES" ,"MUSIC" ,"M_FEES" ]))
```

```python
elif(ch==3):

    roll_no=input("enter roll number to update:")

    name = input("enter student name:")

    std=input("enter the stantard:")

    age = input("enter student's age:")

    gender = input("enter student's gender:")

    f_name = input("enter student's father name:")

    address = input("enter student's address:")

    fees_payment = input("enter student's fees payment details(paid/not paid):")

    swumming=input("student is joined in summing class(yer/no):")

    s_fees=input("student is  summing class fees payment(paid/not paid):")

    karathe=input("student is joined in karathe class(yer/no):")

    k_fees=input("student is  summing class fees payment(paid/not paid):")

    sillabam=input("student is joined in sillabam class(yer/no):")

    sill_fees=input("student is  sillabam class fees payment(paid/not paid):")

    volley_ball=input("student is joined in valley ball(yer/no):")

    v_fees=input("student is  valley ball fees payment(paid/not paid):")

    foot_ball=input("student is joined in foot ball(yer/no):")

    f_fees=input("student is  foot ball fees payment(paid/not paid):")

    music=input("student is joined in music class(yer/no):")

    m_fees=input("student is  music class fees payment(paid/not paid):")
```

```python
        cr.execute("UPDATE STUDENT_DETAILS SET name=%s ,age=%s, gender=%s,
std=%s,FATHER_NAME=%s, address=%s  where
roll_no=%s",(name,age,gender,std,f_name,address,roll_no));

        db.commit()




        cr.execute("UPDATE STUDENT_FEES SET name=%s,fees_payment=%s  where
roll_no=%s",(name,fees_payment,roll_no));

        db.commit()




        cr.execute("UPDATE EXTRACURRICULAT_ACTIVITY SET
name=%s,swumming=%s,s_fees=%s,sillabam=%s,sill_fees=%s,karathe=%s,
k_fees=%s,volley_ball=%s,v_fees=%s,foot_ball=%s,f_fees=%s,music=%s, m_fees=%s  where
roll_no=%s",(name,swumming,s_fees,sillabam,sill_fees,karathe,
k_fees,volley_ball,v_fees,foot_ball,f_fees,music, m_fees,roll_no));

        db.commit()



        print("Sucessfully updated")
    elif(ch==4):
        roll_no=input("enter employee number to update:")

        t_name=input("enter teacher name:")

        t_age=input("enter teacher age:")

        t_gender=input("enter teacher gender:")

        t_address=input("enter address:")

        cr.execute("UPDATE TEACHER_DETAILS SET name=%s ,age=%s, gender=%s, address=%s
where emp_no=%s",(t_name,t_age,t_gender,t_address,emp_no));

        db.commit()



    elif(ch==5):
        roll_no=input("enter student's roll number to delete:")
```

```python
        cr.execute("DELETE FROM  STUDENT_DETAILS WHERE ROLL_NO= %s",(roll_no) );

        db.commit();


        cr.execute("DELETE FROM  STUDENT_FEES WHERE ROLL_NO= %s",(roll_no) );

        db.commit();


        cr.execute("DELETE FROM  EXTRACURRICULAT_ACTIVITY WHERE ROLL_NO=
%s",(roll_no) );

        db.commit();



        print("details deleted succesfully ")
    elif(ch==6):

        roll_no=input("enter employee number to delete:")

        cr.execute("DELETE FROM  TEACHER_DETAILS WHERE EMP_NO= %s",(emp_no) );

        db.commit();


    elif(ch==8):

        break;
    else:

        print("<<< invalid entry! try again >>>")
```

CODE EXPLAINATION:

```python
import pymysql
from tabulate import tabulate
db=pymysql.connect(host="localhost",user="root",password="",database="school_management_system")
cr=db.cursor()
sql="DROP TABLE IF EXISTS STUDENT_DETAILS"
cr.execute(sql)
sql="DROP TABLE IF EXISTS STUDENT_FEES"
cr.execute(sql)
sql="DROP TABLE IF EXISTS EXTRACURRICULAT_ACTIVITY"
cr.execute(sql)
sql="DROP TABLE IF EXISTS TEACHER_DETAILS "
cr.execute(sql)
```

- First we import pymysql pakage.

- Next import the pakage called tabulate to display output in table format.

- Then we connect our code to localhost database by using software called XAMPP.

- Create a cursor with cursor variable called "cr",It act as a wire to connect our code and database.

- Sql command called "DROP TABLE IF EXISTS STUDENT_DETAILS" to delete table if table is available.

- By using cursor variable execute the sql command.

- Like wise do same thing for following tables called student fees, extracurricular activity and teacher details.

```
13
14
15  sql="""CREATE TABLE STUDENT_DETAILS (
16          NAME   CHAR(20) ,
17          ROLL_NO INTEGER,
18          STD CHAR(50),
19          AGE INT,
20          GENDER CHAR(10),
21          FATHER_NAME VARCHAR(20),
22          ADDRESS VARCHAR(20))"""
23  cr.execute(sql);
24  sql="""CREATE TABLE TEACHER_DETAILS (
25          NAME   CHAR(20) ,
26          EMP_NO INTEGER,
27          AGE INT,
28          GENDER CHAR(10),
29          ADDRESS VARCHAR(20))"""
30  cr.execute(sql);
31
32  cr.execute("""CREATE TABLE STUDENT_FEES (ROLL_NO INTEGER  ,NAME CHAR(20),  FEES_PAYMENT CHAR(10))""");
33
34  cr.execute("""CREATE TABLE EXTRACURRICULAT_ACTIVITY (ROLL_NO INTEGER  ,NAME CHAR(20),
35          SWUMMING CHAR(5), S_FEES CHAR(10),
36          SILLABAM CHAR(5),SILL_FEES CHAR(10),
37          KARATHE CHAR(5),K_FEES CHAR(10),
38          VOLLEY_BALL CHAR(5),V_FEES CHAR(10),
39          FOOT_BALL CHAR(5),F_FEES CHAR(10),
40          MUSIC CHAR(5),M_FEES CHAR(10))""");
41
```

- Sql command """CREATE TABLE STUDENT_DETAILS (NAME CHAR(20),ROLL_NO INTEGER,   STD CHAR(50),AGE INT,GENDER CHAR(10),FATHER_NAME VARCHAR(20),ADDRESS VARCHAR(20))""" and

  """CREATE TABLE TEACHER_DETAILS(NAMECHAR(20)   , EMP_NO,INTEGER,AGE   INT,GENDER   CHAR(10),ADDRESS VARCHAR(20))"""   and

  """CREATE TABLE STUDENT_FEES (ROLL_NO INTEGER ,NAME CHAR(20), FEES_PAYMENT CHAR(10))""   and

  ""CREATE TABLE EXTRACURRICULAT_ACTIVITY (ROLL_NO INTEGER ,NAME CHAR(20),   SWUMMING CHAR(5), S_FEES CHAR(10),SILLABAM CHAR(5),SILL_FEES CHAR(10),   KARATHE CHAR(5),K_FEES CHAR(10), VOLLEY_BALL CHAR(5),V_FEES CHAR(10), FOOT_BALL CHAR(5),F_FEES CHAR(10), MUSIC CHAR(5),M_FEES CHAR(10))""

- Create table called student details, teacher details, student fees, extracurricular activity.

- By using cursor variable to execute sql command.

```
42  while True:
43      print("1.insert student's details\n2.insert teacher's details\n3.update student's details\n4.update teacher's details\n5.delete student's details\n
44      ch=int(input("enter your choice: "))
45      if(ch==1):
```

- To get number of input from users so we use "while loop"
- We don't know how many student/teacher to join , so we use "true condition" to execute loop infinity times.
- This print statement gives output:

```
1.insert student's details
2.insert teacher's details
3.update student's details
4.update teacher's details
5.delete student's details
6.delete teacher's details
7.display details
8.Exit
```

- Switch condition is used to perform activity, so create variable called "ch" for enter choice.

```
45    if(ch==1):
46        name=input("enter student name:")
47        roll_no=input("enter student roll_no:")
48        std=int(input("enter standard:"))
49        age=input("enter student age:")
50        gender=input("enter student gender:")
51        f_name=input("enter student's father name:")
52        address=input("enter student address:")
53        fees_payment = input("enter student's fees payment details(paid/not paid):")
54        swumming=input("student is joined in summing class(yer/no):")
55        s_fees=input("student is  summing class fees payment(paid/not paid):")
56        karathe=input("student is joined in karathe class(yer/no):")
57        k_fees=input("student is  summing class fees payment(paid/not paid):")
58        sillambam=input("student is joined in sillabam class(yer/no):")
59        sill_fees=input("student is  sillabam class fees payment(paid/not paid):")
60        volley_ball=input("student is joined in valley ball(yer/no):")
61        v_fees=input("student is  valley ball fees payment(paid/not paid):")
62        foot_ball=input("student is joined in foot ball(yer/no):")
63        f_fees=input("student is  foot ball fees payment(paid/not paid):")
64        music=input("student is joined in music class(yer/no):")
65        m_fees=input("student is  music class fees payment(paid/not paid):")
66
67
```

- User enter "1" it get students input from the user

     Output:

```
enter your choice: 1

enter student name:gwotham

enter student roll_no:108

enter standard:5

enter student age:12

enter student gender:male

enter student's father name:arumugam

enter student address:tirupur

enter student's fees payment details(paid/not paid):paid

student is joined in summing class(yer/no):no

student is  summing class fees payment(paid/not paid):no

student is joined in karathe class(yer/no):no

student is  summing class fees payment(paid/not paid):no

student is joined in sillabam class(yer/no):no

student is  sillabam class fees payment(paid/not paid):no

student is joined in valley ball(yer/no):yes

student is  valley ball fees payment(paid/not paid):paid
```

```
57
58    cr.execute("""INSERT INTO  STUDENT_DETAILS( NAME,ROLL_NO ,STD,AGE,GENDER ,FATHER_NAME ,ADDRESS )
59        VALUES (%s,%s,%s,%s,%s,%s,%s)""",(name,roll_no,std,age,gender,f_name,address));
70    db.commit()
71
72    cr.execute("""INSERT INTO  STUDENT_FEES( ROLL_NO ,NAME,FEES_PAYMENT)
73        VALUES (%s,%s,%s)""",(roll_no,name,fees_payment));
74    db.commit()
75
76
77    cr.execute("""INSERT INTO  EXTRACURRICULAT_ACTIVITY( ROLL_NO ,NAME,   SWUMMING , S_FEES ,
78        SILLABAM,SILL_FEES,
79        KARATHE ,K_FEES ,
80        VOLLEY_BALL,V_FEES,
81        FOOT_BALL ,F_FEES ,
82        MUSIC ,M_FEES )
83        VALUES (%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)""",(roll_no,name,swumming,s_fees,sillambam,sill_fees,karathe, k_fees,volley_ball,v_fees,foo
84    db.commit()
85
86
87
88    print("Sucessfully inserted");
```

- This sql command showed in screenshot """"INSERT INTO STUDENT_DETAILS(NAME,ROLL_NO ,STD,AGE,GENDER ,FATHER_NAME ,ADDRESS(%s,%s,%s,%s,%s,%s,%s)"""",(name,roll_no,std,age,gender,f_name,address))" to insert value drived from users .

  "%s"- it is string constant return the value derived from users.

- using cursor variable to execute sql command.

- Number of arguments passed in command is equal in number of "%s"
- Finally give commit operation for each sql command to make changes in database.
- Print message called successfully inserted.

  Output:

```
student is  music class fees payment(paid/not paid):not paid
Sucessfully inserted
```

CHANGES IN CODE OUTPUT:

```
NAME        ROLL_NO    STD   AGE  GENDER     FATHER_NAME    ADDRESS
---------   --------   ----  ---- --------   ------------   --------
tamilmani       100     5    12   male       krishnamurthy  tirupur
vignesh         102     5    12   male       velmurugan     tirupur
lenin           104     5    12   male       kannan         tirupur
monisha         106     5    12   female     malai          tirupur
gwotham         108     5    12   male       arumugam       tirupur
NAME    EMP_NO   AGE    GENDER   ADDRESS
------  -------- -----  -------- ---------
   ROLL_NO  NAME       FEES_PAYMENT
   -------- --------   --------------
       100  tamilmani  paid
       102  vignesh    paid
       104  lenin      not paid
       106  monisha    paid
       108  gwotham    paid
   ROLL_NO  NAME       SWUMMING   S_FEES  SILLABAM  SILL_FEES  KARATHE  K_FEES  VOLLEY_BALL  V_FEES  FOOT_BALL  F_FEES    MUSIC  M_FEES
   -------- --------   ---------  ------  --------  ---------  -------  ------  -----------  ------  ---------  --------  -----  --------
       100  tamilmani  yes        paid    no        no         yes      paid    no           no      no         no        no     no
       102  vignesh    no         no      no        no         no       no      yes          paid    yes        not paid  no     no
       104  lenin      yes        paid    yes       not paid   yes      paid    no           no      no         no        yes    paid
       106  monisha    no         no      no        no         no       no      no           no      no         no        no     no
       108  gwotham    no         no      no        no         no       no      yes          paid    no         no        yes    not paid
```

CHANGES IN DATABASE FOR STUDENT DETAILS,EXTRACURRICULAR ACTIVITY,STUDENT FEES:

```
89     elif(ch==2):
90       t_name=input("enter teacher name:")
91       emp_no=input("enter teacher's employ number:")
92       t_age=input("enter teacher age:")
93       t_gender=input("enter teacher gender:")
94       t_address=input("enter address:")
95       cr.execute("""INSERT INTO  TEACHER_DETAILS( NAME,EMP_NO ,AGE,GENDER ,ADDRESS )
96           VALUES (%s,%s,%s,%s,%s)""",(t_name,emp_no,t_age,t_gender,t_address));
97       db.commit()
98       print("Sucessfully inserted");
99     elif(ch==7):
```

- User enter "2" to get teacher information from the user.

Output:

```
108   gwotham     no                no           no            no
1.insert student's details
2.insert teacher's details
3.update student's details
4.update teacher's details
5.delete student's details
6.delete teacher's details
7.display details
8.Exit

enter your choice: 2

enter teacher name:shiva

enter teacher's employ number:45

enter teacher age:37

enter teacher gender:male

enter address:tirupur
Sucessfully inserted
1 insert student's details
```

- Sql command   """INSERT INTO TEACHER_DETAILS(NAME,EMP_NO ,AGE,GENDER ,ADDRESS)VALUEs(%s,%s,%s,%s,%s)""",(t_name,emp_no,t_age,t_gender ,t_address)""" is used to insert value to table from the user.

- Give commit operation to make changes in database.

CHANGES IN CODE OUTPUT:

```
NAME          EMP_NO      AGE   GENDER      ADDRESS
--------      --------    ----- --------    ---------
shiva             45       37   male        tirupur
ramkumar          47       29   male        tirupur
kanaha            49       31   female      tirupur
kalai             51       32   male        tirupur
```

CHANGES IN DATABASE FOR TEACHER DETAILS:

```
elif(ch==3):
    roll_no=input("enter roll number to update:")
    name = input("enter student name:")
    std=input("enter the stantard:")
    age = input("enter student's age:")
    gender = input("enter student's gender:")
    f_name = input("enter student's father name:")
    address = input("enter student's address:")
    fees_payment = input("enter student's fees payment details(paid/not paid):")
    swumming=input("student is joined in summing class(yer/no):")
    s_fees=input("student is  summing class fees payment(paid/not paid):")
    karathe=input("student is joined in karathe class(yer/no):")
    k_fees=input("student is  summing class fees payment(paid/not paid):")
    sillabam=input("student is joined in sillabam class(yer/no):")
    sill_fees=input("student is  sillabam class fees payment(paid/not paid):")
    volley_ball=input("student is joined in valley ball(yer/no):")
    v_fees=input("student is  valley ball fees payment(paid/not paid):")
    foot_ball=input("student is joined in foot ball(yer/no):")
    f_fees=input("student is  foot ball fees payment(paid/not paid):")
    music=input("student is joined in music class(yer/no):")
    m_fees=input("student is  music class fees payment(paid/not paid):")
```

- If user enter "3" to updates the entered details
- By using roll_no   as primary key to updates details.

OUTPUT:

```
enter your choice: 3

enter roll number to update:108

enter student name:gowtham

enter the stantard:5

enter student's age:12

enter student's gender:male

enter student's father name:arumugam

enter student's address:salem

enter student's fees payment details(paid/not paid):paid

student is joined in summing class(yer/no):yes

student is  summing class fees payment(paid/not paid):paid

student is joined in karathe class(yer/no):yes

student is  summing class fees payment(paid/not paid):paid

student is joined in sillabam class(yer/no):yes

student is  sillabam class fees payment(paid/not paid):paid

student is joined in valley ball(yer/no):yes

student is  valley ball fees payment(paid/not paid):paid
```

```
student is  sillabam class fees payment(paid/not paid):paid

student is joined in valley ball(yer/no):yes

student is  valley ball fees payment(paid/not paid):paid

student is joined in foot ball(yer/no):yes

student is  foot ball fees payment(paid/not paid):paid

student is joined in music class(yer/no):yes

student is  music class fees payment(paid/not paid):paid
Sucessfully updated
```

- Updated details are enter in table by users.
- Finally sent a message called successfully updated.

```
        cr.execute("UPDATE STUDENT_DETAILS SET name=%s ,age=%s, gender=%s, std=%s,FATHER_NAME=%s, address=%s  where roll_no=%s",(name,age,gender,std,f_
        db.commit()


        cr.execute("UPDATE STUDENT_FEES SET name=%s,fees_payment=%s  where roll_no=%s",(name,fees_payment,roll_no));
        db.commit()

        cr.execute("UPDATE EXTRACURRICULAT_ACTIVITY SET name=%s,swumming=%s,s_fees=%s,sillabam=%s,sill_fees=%s,karathe=%s, k_fees=%s,volley_ball=%s,v_f
        db.commit()

        print("Sucessfully updated")
```

- Sql command "UPDATE STUDENT_DETAILS SET name=%s ,age=%s, gender=%s, std=%s,FATHER_NAME=%s, address=%s where roll_no=%s",(name,age,gender,std,f_name,address,roll_no) Used to updates details in table.

- Give commit to make changes in database.

- Do same for table student fees, extracurricular activity.
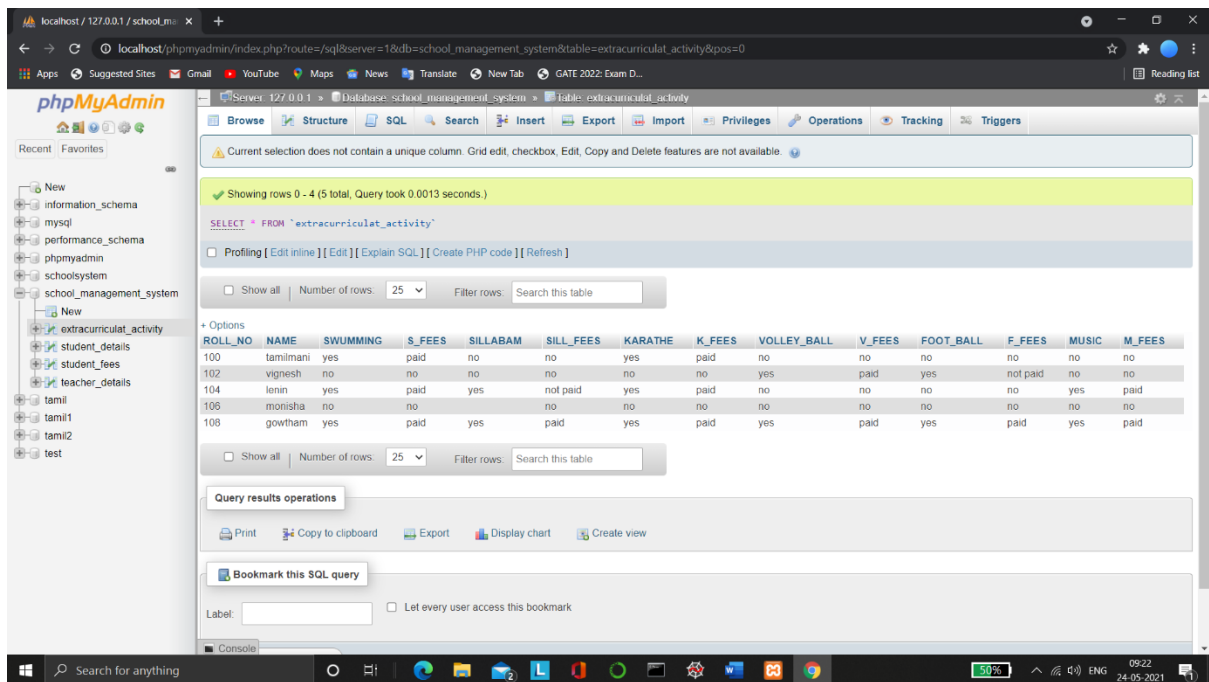
CHANGES IN CODE OUTPUT:

```
enter your choice: 7
NAME         ROLL_NO    STD   AGE  GENDER   FATHER_NAME    ADDRESS
---------    -------    ---   ---  ------   -----------    -------
tamilmani    100        5     12   male     krishnamurthy  tirupur
vignesh      102        5     12   male     velmurugan     tirupur
lenin        104        5     12   male     kannan         tirupur
monisha      106        5     12   female   malai          tirupur
gowtham      108        5     12   male     arumugam       salem
NAME         EMP_NO     AGE   GENDER   ADDRESS
--------     ------     ---   ------   -------
shiva        45         37    male     tirupur
ramkumar     47         29    male     tirupur
kanaha       49         31    female   tirupur
kalai        51         32    male     tirupur
ROLL_NO   NAME       FEES_PAYMENT
-------   ----       ------------
100       tamilmani  paid
102       vignesh    paid
104       lenin      not paid
106       monisha    paid
108       gowtham    paid
ROLL_NO  NAME       SWUMMING   S_FEES   SILLABAM  SILL_FEES  KARATHE  K_FEES  VOLLEY_BALL  V_FEES  FOOT_BALL  F_FEES   MUSIC  M_FEES
-------  ---------  --------   ------   --------  ---------  -------  ------  -----------  ------  ---------  ------   -----  ------
100      tamilmani  yes        paid     no        no         yes      paid    no           no      no         no       no     no
102      vignesh    no         no       no        no         no       no      yes          paid    yes        not paid no     no
104      lenin      yes        paid     yes       not paid   yes      paid    no           no      no         no       yes    paid
106      monisha    no         no       no        no         no       no      no           no      no         no       no     no
108      gowtham    yes        paid     yes       paid       yes      paid    yes          paid    yes        paid     yes    paid
1.insert student's details
```
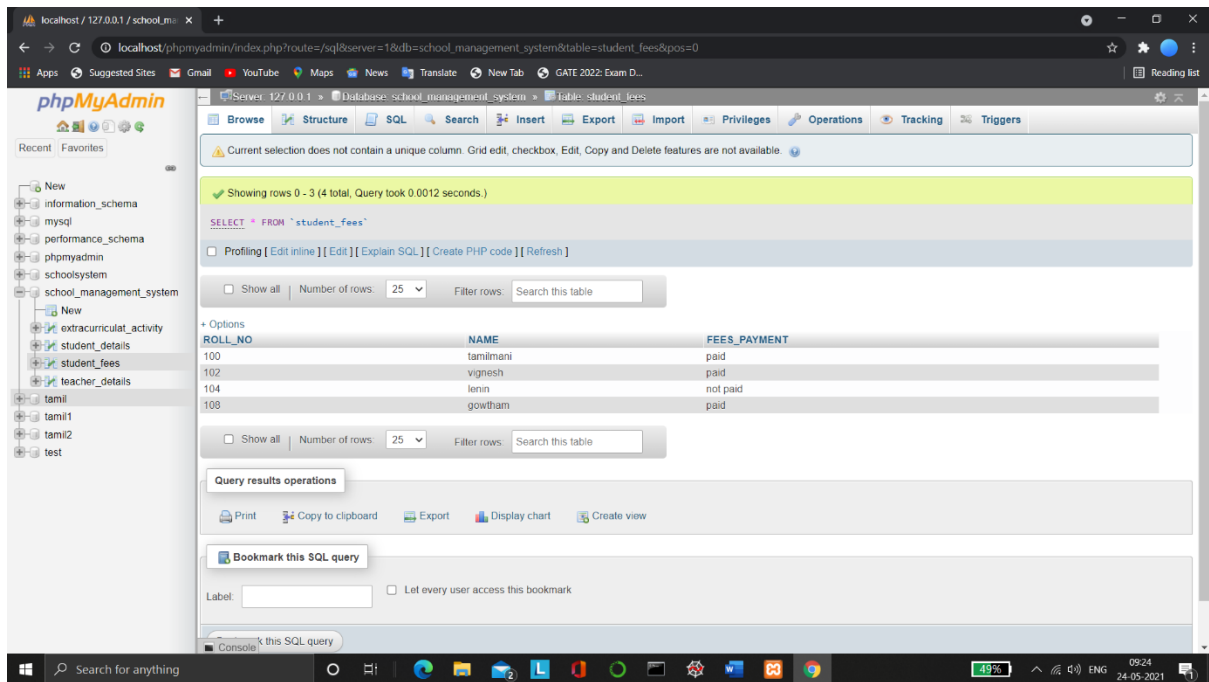
UPDATED CHANGES IN DATABASE FOR STUDENTDETAILS,EXTRACURRICULAR ACTIVITY,STUDENT FEES:

CHANGES: name of roll number 108 is updated to "Gowtham" and his

address is changed to "salem" from "turupur".

CHANGES: name of roll number 108 is updated   the fees structure for

extracurricular activities.

CHANGES: name of roll number 108 is updated   the fees structure for

Academic and his name.

```
      print("Sucessfully updated")
   elif(ch==4):
      roll_no=input("enter employee number to update:")
      t_name=input("enter teacher name:")
      t_age=input("enter teacher age:")
      t_gender=input("enter teacher gender:")
      t_address=input("enter address:")
      cr.execute("UPDATE TEACHER_DETAILS SET name=%s ,age=%s, gender=%s, address=%s  where emp_no=%s",(t_name,t_age,t_gender,t_address,emp_no));
      db.commit()

   elif(ch==5):
```

- User enter "4" to update details in teacher.
    Output:

```
enter your choice: 4

enter employee number to update:51

enter teacher name:kalaiyarasi

enter teacher age:25

enter teacher gender:female

enter address:chennai
```

- Updated details are entered in table by users.
- Sql command "UPDATE TEACHER_DETAILS SET name=%s ,age=%s, gender=%s, address=%s where emp_no=%s",(t_name,t_age,t_gender,t_address,emp_no) is used to updates changes in database.
- Finally give commit to make changes in database.

Code output:

```
NAME             EMP_NO    AGE  GENDER    ADDRESS
-----------      --------  ---- --------  ---------
shiva                45     37  male      tirupur
ramkumar             47     29  male      tirupur
kanaha               49     31  female    tirupur
kalaiyarasi          51     25  female    chennai
   ROLL_NO   NAME         FEES_PAYMENT
```
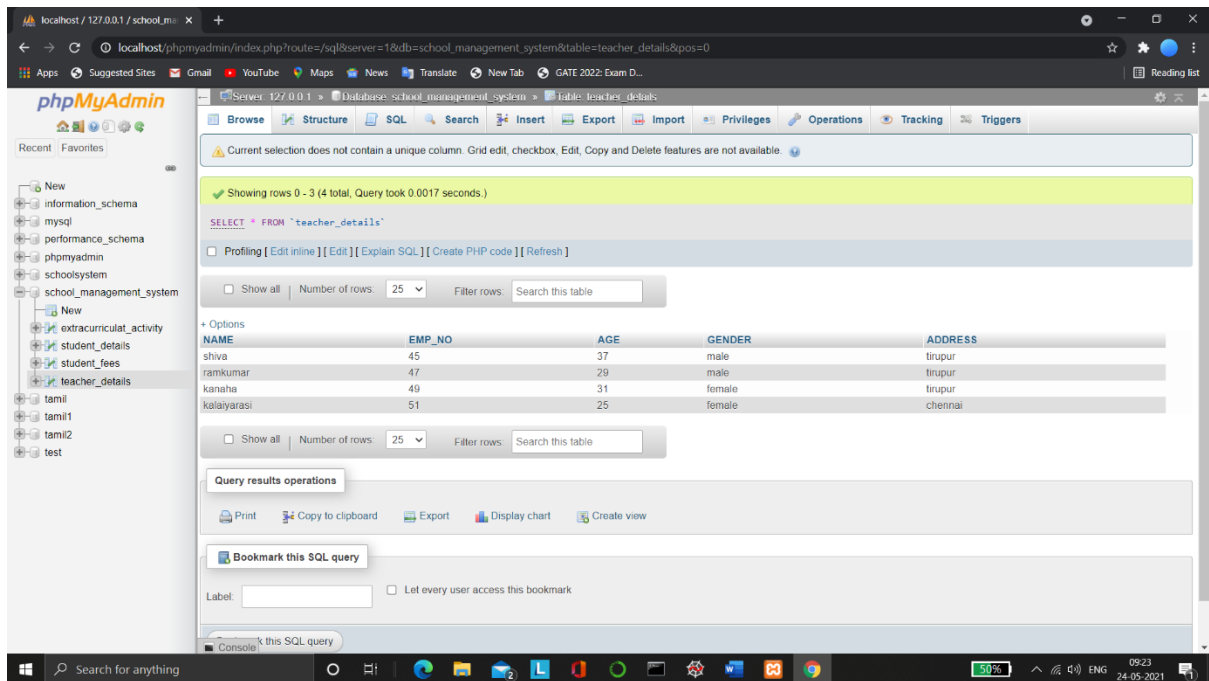
Changes: emp_no 51 name has to be updated to kalaiyarasi from kalai and
gender is updated

CHANGES IN DATABASE:

Kalai → kalaiyarasi

Male →female

```
elif(ch==5):
    roll_no=input("enter student's roll number to delete:")

    cr.execute("DELETE FROM  STUDENT_DETAILS WHERE ROLL_NO= %s",(roll_no) );
    db.commit();

    cr.execute("DELETE FROM  STUDENT_FEES WHERE ROLL_NO= %s",(roll_no) );
    db.commit();

    cr.execute("DELETE FROM  EXTRACURRICULAT_ACTIVITY WHERE ROLL_NO= %s",(roll_no) );
    db.commit();


    print("details deleted succesfully ")
elif(ch==6):
```

- User enter "5" to delete rows in table student details, student fees, extracurricular by using roll_no as primary key.
- Sql command "DELETE FROM STUDENT_DETAILS WHERE ROLL_NO= %s" Is used to delete row in student details table.
- Finally give commit, like wise do same think for table student fees, extracurricular activity.

Output:

```
1.insert student's details
2.insert teacher's details
3.update student's details
4.update teacher's details
5.delete student's details
6.delete teacher's details
7.display details
8.Exit

enter your choice: 5

enter student's roll number to delete:106
details deleted succesfully
```

Code output:

```
inte    enter your choice: 7
        NAME          ROLL_NO    STD   AGE   GENDER    FATHER_NAME     ADDRESS
TE      ---------     -------    ----  ----  --------  -------------   -------
        tamilmani         100     5     12   male      krishnamurthy   tirupur
        vignesh           102     5     12   male      velmurugan      tirupur
TE      lenin             104     5     12   male      kannan          tirupur
        gowtham           108     5     12   male      arumugam        salem
TE      NAME          EMP_NO     AGE   GENDER    ADDRESS
        ---------     -------    ----  --------  --------
TE      shiva              45     37   male      tirupur
        ramkumar           47     29   male      tirupur
        kanaha             49     31   female    tirupur
ele     kalaiyarasi        51     25   female    chennai
        ROLL_NO  NAME       FEES_PAYMENT
ent     -------  ---------  ------------
ETE          100 tamilmani  paid
             102 vignesh    paid
             104 lenin      not paid
             108 gowtham    paid
        ROLL_NO  NAME      SWUMMING   S_FEES   SILLABAM   SILL_FEES   KARATHE   K_FEES   VOLLEY_BALL   V_FEES   FOOT_BALL   F_FEES      MUSIC   M_FEES
        -------  --------  --------   ------   --------   ---------   -------   ------   -----------   ------   ---------   ------      -----   ------
id           100 tamilmani yes        paid     no         no          yes       paid     no            no       no          no          no      no
             102 vignesh   no         no       no         no          no        no       yes           paid     yes         not paid    no      no
             104 lenin     yes        paid     yes        not paid    yes       paid     no            no       no          no          yes     paid
             108 gowtham   yes        paid     yes        paid        yes       paid     yes           paid     yes         paid        yes     paid
        1.insert student's details
```

Changes: roll_no 106 is deleted

DELETE CHANGES IN DATABASE FOR STUDENTDETAILS,EXTRACURRICULAR ACTIVITY,STUDENT FEES:

```
elif(ch==6):
    roll_no=input("enter employee number to delete:")
    cr.execute("DELETE FROM  TEACHER_DETAILS WHERE EMP_NO= %s",(emp_no) );
    db.commit();
```

- User enter "6" to delete teacher details by using emp_ni as primary key.
- Sql command DELETE FROM TEACHER_DETAILS WHERE EMP_NO= %s",(emp_no) is used to make change in table.
- Give commit to change in database.

Code output:

```
                       paid
STUDENT_I              1.insert student's details
                       2.insert teacher's details
                       3.update student's details
STUDENT_I              4.update teacher's details
                       5.delete student's details
                       6.delete teacher's details
EXTRACURI              7.display details
                       8.Exit

                       enter your choice: 6
uccesfully
```

```
gowtham        108      5    12  male       arumug
NAME         EMP_NO    AGE  GENDER    ADDRESS
--------     --------  ---- -------- ---------
shiva             45    37  male      tirupur
ramkumar          47    29  male      tirupur
kanaha            49    31  female    tirupur
```

Change:emp_no=51 is deleted

CHANGES IN DATABASE FOR TEACHER DETAILS:

```
    print( sucess,aury inserted );
elif(ch==7):

    ql = "SELECT * FROM STUDENT_DETAILS"
    cr.execute(ql);
    result1=cr.fetchall();
    ql = "SELECT * FROM STUDENT_FEES"
    cr.execute(ql);
    result2=cr.fetchall();
    cr.execute( "SELECT * FROM EXTRACURRICULAT_ACTIVITY");
    result3=cr.fetchall();
    ql = "SELECT * FROM TEACHER_DETAILS"
    cr.execute(ql);
    result4=cr.fetchall();
    print(tabulate(result1,headers=["NAME","ROLL_NO","STD","AGE","GENDER","FATHER_NAME","ADDRESS"]))
    print(tabulate(result4,headers=["NAME","EMP_NO","AGE","GENDER","ADDRESS"]))
    print(tabulate(result2,headers=["ROLL_NO","NAME","FEES_PAYMENT"]))
    print(tabulate(result3,headers=["ROLL_NO","NAME", "SWUMMING" ," S_FEES","SILLABAM","SILL_FEES"  , "KARATHE" ,"K_FEES" ,  "VOLLEY_BALL","V_FEES",
elif(ch==3):
```

- User enter "7" display all the details in all tables.

- Sql command SELECT * FROM STUDENT_DETAILS display all value in table STUDENT_DETAILS

- Sql command "SELECT * FROM STUDENT_FEES" display all value in table STUDENT_FEES

- Sql command SELECT * FROM EXTRACURRICULAT_ACTIVITY display all value in table EXTRACURRICULAT_ACTIVITY

- Sql command "SELECT * FROM TEACHER_DETAILSdisplay all value in table TEACHER_DETAILS

Code output:

```
enter your choice: 7
NAME          ROLL_NO    STD   AGE  GENDER    FATHER_NAME    ADDRESS
---------    ---------  -----  ---- --------  -------------  ---------
tamilmani     100        5     12   male      krishnamurthy  tirupur
vignesh       102        5     12   male      velmurugan     tirupur
lenin         104        5     12   male      kannan         tirupur
monisha       106        5     12   female    malai          tirupur
gwotham       108        5     12   male      arumugam       tirupur
NAME          EMP_NO    AGE  GENDER    ADDRESS
--------     -------   ----  --------  ---------
shiva         45        37   male      tirupur
ramkumar      47        29   male      tirupur
kanaha        49        31   female    tirupur
kalai         51        32   male      tirupur
  ROLL_NO  NAME        FEES_PAYMENT
 --------- ---------   --------------
     100   tamilmani   paid
     102   vignesh     paid
     104   lenin       not paid
     106   monisha     paid
     108   gwotham     paid
  ROLL_NO  NAME        SWUMMING    S_FEES   SILLABAM   SILL_FEES   KARATHE   K_FEES   VOLLEY_BALL   V_FEES   FOOT_BALL   F_FEES     MUSIC   M_FEES
 --------- ---------   ----------  -------  ---------  ----------  --------  -------  ------------  -------  ----------  --------   ------  --------
     100   tamilmani   yes         paid     no         no          yes       paid     no            no       no          no         no      no
     102   vignesh     no          no       no         no          no        no       yes           paid     yes         not paid   no      no
     104   lenin       yes         paid     yes        not paid    yes       paid     no            no       no          no         yes     paid
     106   monisha     no          no       no         no          no        no       no            no       no          no         no      no
     108   gwotham     no          no       no         no          no        no       yes           paid     no          no         yes     not paid
1.insert student's details
2.insert teacher's details
```

```python
elif(ch==8):
    break;
else:
    print("<<< invalid entry! try again >>>")
```

- User enter "8" to exit
- Unless user enter rather then other number "0 -8" print a message called "<<< invalid entry! Try again >>>

Code output:

```
In [1]: runfile('D:/DBMS_MINIPROJECT.py', wdir='D:')
1.insert student's details
2.insert teacher's details
3.update student's details
4.update teacher's details
5.delete student's details
6.delete teacher's details
7.display details
8.Exit

enter your choice: 10
<<< invalid entry! try again >>>
```

CONCLUSION:

Thus, the demonstration of school management system is implemented.