# COMPUTER SCIENCE INVESTIGATORY PROJECT

# STUDENT MANAGEMENT SYSTEM

**CLASS XII 2020-2021** 

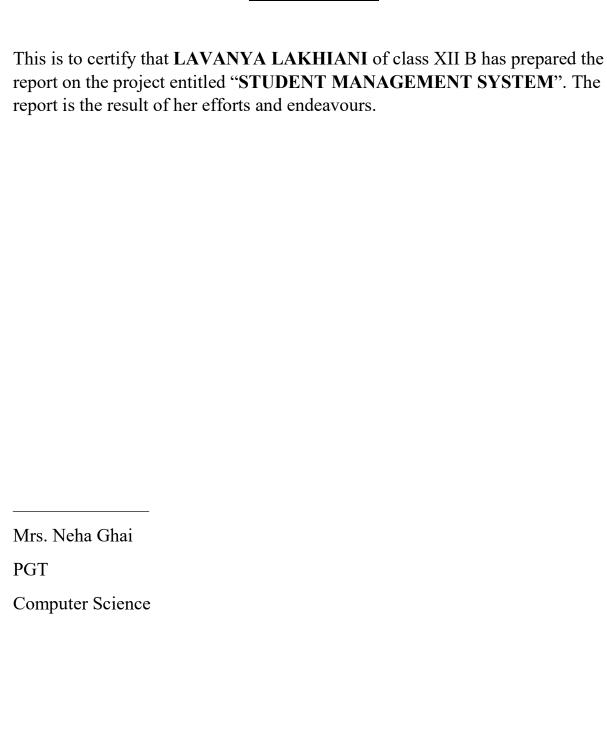
**SUBJECT CODE - 083** 

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### **CERTIFICATE**



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#### **SOURCE CODE**

## **#PROGRAM MODULE: Student management system.py**

```
importStudent_Menu
importStu_details
importAcademic_details
importFee details
importLib_details
while True:
     print("----")
     print("-----")
     print("\t\tWelcome To Student Management System")
     print("-----")
     print("-----")
     print("1. Student Details")
     print("2. Academic Details")
     print("3. Fee Details")
     print("4. Library Details")
     print("5. Exit")
     print("-----")
     ch = int(input("Enter your choice(1-5): "))
     if ch == 1:
           Stu_details.Stu_Det_menu()
     elif ch == 2:
           Academic_details.Academic_Det_menu()
     elif ch == 3:
           Fee details.Fee Det menu()
```

```
Lib details.Library Det menu()
     elif ch == 5:
           break
     else:
           print("Invalid choice!!")
#PROGRAM MODULE: Student_Menu.py
import Student_Menu
import Stu_details
import Academic_details
import Fee_details
import Lib_details
while True:
     print("-----")
     print("-----")
     print("\t\tWelcome To Student Management System")
     print("-----")
     print("-----")
     print("1. Student Details")
     print("2. Academic Details")
     print("3. Fee Details")
     print("4. Library Details")
     print("5. Exit")
     print("-----")
     ch = int(input("Enter your choice(1-5): "))
     if ch == 1:
```

elif ch == 4:

```
Stu_details.Stu_Det_menu()
     elif ch == 2:
           Academic_details.Academic_Det_menu()
     elif ch == 3:
           Fee_details.Fee_Det_menu()
     elif ch == 4:
           Lib_details.Library_Det_menu()
     elif ch == 5:
           break
     else:
           print("Invalid choice!!")
#PROGRAM MODULE: Stu_details.py
import Student Menu
import Stu_details
import mysql.connector as sql
def Stu_Det_menu():
while True:
     print("-----")
     print("-----")
     print(" Student Details")
     print("-----")
     print("-----")
     print("1. Showing the list of Students")
     print("2. Add New Students")
     print("3. Search Student")
     print("4. Update Student")
     print("5. Delete Student")
```

```
print("-----")
       print("6. Exit")
       ch = int(input("Enter your choice: "))
       if ch == 1:
              Stu_details.show()
       elif ch == 2:
              Stu_details.add()
       elif ch == 3:
              Stu_details.search()
       elif ch == 4:
              Stu_details.update()
       elif ch == 5:
              Stu details.delete()
       elif ch == 6:
              return
       else:
              print("Invalid choice!! Try again")
def show():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       cursor.execute("select * from Stu_Det")
       det = cursor.fetchall()
       for row in det:
              print(row)
```

```
def add():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       RollNo = int(input("Enter Roll No.: "))
       Name = input("Enter Name: ")
       AdmnNo = int(input("Enter Admission No.: "))
       Class = input("Enter Class with Section: ")
       Address = input("Enter Address: ")
       PhnNo =int(input("Enter Phone No: "))
       query = "insert into Stu Det(RollNo, Name, AdmnNo, Class, Address, PhnNo) values
       ({},'{}',{},'{}','{}','{}','{}')".format(RollNo, Name, AdmnNo, Class, Address, PhnNo)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Record saved!!")
def search():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to be searched: ")
       query = "select * from Stu_Det where AdmnNo = {}".format(x)
       cursor.execute(query)
       det = cursor.fetchall()
       print(det)
def update():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
```

```
cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to update details: ")
       name = input("Enter updated name: ")
       add = input("Enter updated address: ")
       phn = int(input("Enter updated Phone no.: "))
       query = "update Stu Det set Name = {}, Address = {}, PhnNo = {} where AdmnNo = {}
       ".format(name,add, phn,x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Details updated!!")
def delete():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to be deleted: ")
       query = "delete from Stu Det where AdmnNo = {} ".format(x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Record deleted!!")
#PROGRAM MODULE: Academic_details.py
importStudent_Menu
importAcademic\_details
importmysql.connector as sql
defAcademic_Det_menu():
while True:
```

```
print("----")
print(" Academic Details")
print("-----")
print("-----")
print("1. Showing the academic details of students")
print("2. Add Students")
print("3. Search Student")
print("4. Update Student")
print("5. Delete Student")
print("6. Exit")
print("-----")
ch = int(input("Enter your choice: "))
if ch == 1:
      Academic_details.show()
elif ch == 2:
      Academic_details.add()
elif ch == 3:
      Academic_details.search()
elif ch == 4:
      Academic_details.update()
elif ch == 5:
      Academic_details.delete()
elif ch == 6:
      break
else:
      print("Invalid choice!! Try again")
```

```
def show():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       cursor.execute("select * from Academic_Details")
       det = cursor.fetchall()
       for row in det:
              print(row)
def add():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       RollNo = int(input("Enter Roll No.: "))
       Name = input("Enter Name: ")
       AdmnNo = int(input("Enter Admission No.: "))
       AvgMarks = float(input("Enter Average Marks: "))
       Grade = input("Enter Grade: ")
       Status = input("Enter Status: ")
       query = "insert into
       Academic Details(RollNo,Name,AdmnNo,AvgMarks,Grade,Status) values
       ({},'{}',{},{},'{}')".format(RollNo, Name, AdmnNo, AvgMarks, Grade, Status)
       cursor.execute(query)
       print("Record saved!!")
def search():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to be searched: "))
```

```
query = "select * from Academic_Details where AdmnNo = {}".format(x)
       cursor.execute(query)
       det = cursor.fetchall()
       print(det)
def update():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to update name: "))
       name = input("Enter updated name: ")
       avg = float(input("Enter updated avgmarks: "))
       gr = input("Enter updated Grade: ")
       st = input("Enter updated Status: ")
       query = "update Academic Details set Name = {}, AvgMarks = {}, Grade = {}, Status =
       {} where AdmnNo = {}".format(name,avg,gr,st,x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Details updated!!")
def delete():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to be deleted: ")
       query = "delete from Academic Details where AdmnNo = {}".format(x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
```

```
print("Record deleted!!")
```

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```
#PROGRAM MODULE: Fee_details.py
importStudent Menu
importFee_details
importmysql.connector as sql
defFee_Det_menu():
while True:
     print("-----")
     print("-----")
     print(" Fee Details")
     print("-----")
     print("-----")
     print("1. Showing the Fee details of students")
     print("2. Add Students")
     print("3. Search Student")
     print("4. Update Student")
     print("5. Delete Student")
     print("6. Exit")
     print("-----")
     ch = int(input("Enter your choice"))
     if ch == 1:
           Fee_Details.show()
     elif ch == 2:
           Fee_Details.add()
     elif ch == 3:
           Fee_Details.search()
```

```
elif ch == 4:
              Fee Details.update()
       elif ch == 5:
              Fee Details.delete()
       elif ch == 6:
              return
       else:
              print("Invalid choice!! Try again")
def show():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       cursor.execute("select * from Fee_Det")
       det = cursor.fetchall()
       for row in det:
              print(row)
def add():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       AdmnNo = int(input("Enter Admission No.: "))
       Fee Paid Rs = int(input("Enter the fee amount already paid: "))
       Fee Due = input("Enter 'Yes' if fee is due and 'No' otherwise : ")
       Late_Fee_Rs = int(input("Enter the late fee amount : "))
       query = "insert into Fee Det(AdmnNo,Fee Paid Rs,Fee Due,Late Fee Rs) values
       ({},{},'{}',{})".format(AdmnNo,Fee_Paid_Rs,Fee_Due,Late_Fee_Rs)
       cursor.execute(query)
```

```
print("Record saved!!")
def search():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to be searched: "))
       query = "select * from Fee Det where AdmnNo = {}".format(x)
       cursor.execute(query)
       det = cursor.fetchall()
       print(det)
def update():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to update Fee paid: "))
       fee paid Rs = int(input("Enter fee amount already paid "))
       fee_due = input("Enter updated fee status: ")
       late_fee_Rs = int(input("Enter late fee : "))
       query = "update Fee_Det set Fee_Paid_Rs = {}, Fee_Due = {}, Late_Fee_Rs = {} where
       AdmnNo = {}".format(fee_paid_Rs, fee_due, late_fee_Rs, x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
def delete():
       mycon = comp.connect(host = "localhost", user = "root", password = "12345",
       database = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to be deleted: "))
```

```
query = "delete from Fee_Det where AdmnNo = {}".format(x)
     cursor.execute(query)
     mycon.commit()
     mycon.close()
     print("Record deleted!!")
#PROGRAM MODULE: Lib_details.py
importStudent Menu
importLib details
importmysql.connector as sql
defLibrary_Det_menu():
while True:
     print("-----")
     print("-----")
     print(" Library Details")
     print("-----")
     print("-----")
     print("1. Showing the Library details of students")
     print("2. Add Students")
     print("3. Search Student")
     print("4. Update Student")
     print("5. Delete Student")
     print("6. Exit")
     print("-----")
     ch = int(input("Enter your choice"))
     ifch == 1:
           Library_Details.show()
```

```
elif ch == 2:
              Library Details.add()
       elif ch == 3:
              Library_Details.search()
       elif ch == 4:
              Library_Details.update()
       elif ch == 5:
              Library Details.delete()
       elif ch == 6:
              return
       else:
              print("Invalid choice!! Try again")
def show():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       cursor.execute("select * from Lib_Det")
       det = cursor.fetchall()
       for row in det:
              print(row)
def add():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       AdmnNo = int(input("Enter Admission No.: "))
       BooksIssued = input("Enter the book issued :")
       BooksReturned = input("Enter if the book has been returned- Yes/No:")
       LateFee_Rs = int(input("Enter the late fee to be charged :")
```

```
query = "insert into Lib Det(AdmnNo,BooksIssued,BooksReturned,LateFee Rs)
       values ({},'{}','{}','{}}".format(AdmnNo,BooksIssued,BooksReturned,LateFee Rs)
       cursor.execute(query)
       print("Record saved")
def search():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to be searched: ")
       query = "select * from Lib Det where AdmnNo = {}".format(x)
       cursor.execute(query)
       det = cursor.fetchall()
       print(det)
def update():
       mycon = sql.connect(host = "localhost", user = "root", password = "12345", database
       = "STUDENT")
       cursor = mycon.cursor()
       x = int(input("Enter AdmnNo. of the student to update BooksIssued: "))
       booksiss = input("Enter the updated book issued :")
       booksret = input("Enter if the book has been returned(Yes/No):")
       latefee = int(input("Enter the updated late fee to be charged :"))
       query = "update Lib_Det set BooksIssued = {}, BooksReturned = {}, LateFee_Rs = {}
       where AdmnNo = {}".format(booksiss, booksret, latefee, x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Details updated!!")
def delete():
```

```
= "STUDENT")
       cursor = mycon.cursor()
       x = input("Enter AdmnNo. of the student to be deleted: ")
       query = "delete from Lib_Det where AdmnNo = '%s'"%(x)
       cursor.execute(query)
       mycon.commit()
       mycon.close()
       print("Record deleted!!")
#TABLES IN SQL: Student details
create database STUDENT;
use STUDENT;
create table STUDENT.Stu Det
       RollNo
                     integer,
       Name
                     char(30),
       AdmnNo
                     integer,
       Class
                     char(4),
       Address
                     char(20),
                     bigint);
       PhnNo
insert into STUDENT.Stu Det
values(1, "Parth Samthaan", 13670, "XII-A", "45B, Defence Colony", 9821573959);
insert into STUDENT.Stu Det
values(2, "Aastha Oberoi", 13675, "XII-A", "23F, Model Town", 9818486839);
insert into STUDENT.Stu_Det
values(3, "Shruti Jaisinghaani", 14380, "XII-B", "55, S Block, GK-1", 9819395868);
```

mycon = sql.connect(host = "localhost", user = "root", password = "12345", database

```
insert into STUDENT.Stu Det
values(4, "Raghav Agnihotri", 14560, "XII-B", "75, S Block, GK-1", 9813456868);
insert into STUDENT.Stu_Det
values(5, "Tanisha Walia", 14567, "XII-B", "27A, Vasant Vihar", 9811325868);
#TABLES IN SQL: Academic details
use STUDENT;
create table Academic_Details
(
       RollNo
                     integer,
       Name
                     char(30),
       AdmnNo
                     integer,
       AvgMarks
                     integer,
       Grade
                     char(1),
                     char(4));
       Status
insert into Academic_Details
values(1, "Parth Samthaan", 13670, 94, "A", "Pass");
insert into Academic_Details
values(2, "Aastha Oberoi", 13675, 88, "B", "Pass");
insert into Academic_Details
values(3, "Shruti Jaisinghaani", 14380, 24, "F", "Fail");
insert into Academic_Details
values( 4, "Raghav Agnihotri", 14560, 71, "C", "Pass");
```

```
insert into Academic Details
values(5, "Tanisha Walia", 14567, 69, "D", "Pass");
#TABLES IN SQL: Fees details
use STUDENT;
create table STUDENT.Fee_Det
(
      AdmnNo
                    integer,
      Fee_Paid_Rs integer,
       Fee_Due
                  char(3),
       Late_Fee_Rs integer );
insert into STUDENT.Fee_Det
values( 13670, 13000, "No", 0);
insert into STUDENT.Fee_Det
values( 13675, 13500, "Yes", 100);
insert into STUDENT.Fee_Det
values(14380, 15000, "Yes", 100);
insert into STUDENT.Fee_Det
values( 14560 , 12000, "No", 0);
insert into STUDENT.Fee_Det
values( 14567, 12500, "No", 0);
#TABLES IN SQL: Library details
use STUDENT;
```

```
create table Lib_Det
       AdmnNo
                            integer,
       BooksIssued
                            char(30),
       BooksReturned
                            char(3),
       LateFee_Rs
                            integer);
insert into STUDENT.Lib_Det
values(13670, "Fault in our stars", "No", 10);
insert into STUDENT.Lib_Det
values(13675, "Angels and Demons", "Yes", 0);
insert into STUDENT.Lib_Det
values(13675, "Digital Fortress", "No", 10);
insert into STUDENT.Lib_Det
values(14560, "Harry Potter Series", "No", 10);
insert into STUDENT.Lib_Det
values( 14567, "Alchemist", "No", 10);
insert into STUDENT.Lib_Det
values( 14567, "Divergent", "Yes", 0);
insert into STUDENT.Lib_Det
values( 14380, "Insurgent", "Yes", 0);
```

### **OUTPUT**

Welcome To Student Management System	
1. Student Details	
2. Academic Details	
3. Fee Details	
4. Library Details	
5. Exit	
Enter your choice (1-5): 1	
Student Details	
1. Showing the list of Students	
2. Add New Students	
3. Search Student	
4. Update Student	
5. Delete Student	
6. Exit	
[]	
Enter your choice: 1 (1, 'Parth Samthaan', 13670, 'XII-A', '45B, Defence (2, 'Aastha Oberoi', 13675, 'XII-A', '23F, Model Tow (3, 'Shruti Jaisinghaani', 14380, 'XII-B', '55, S Bl (4, 'Raghav Agnihotri', 14560, 'XII-B', '75, S Block (5, 'Tanisha Walia', 14567, 'XII-B', '27A, Vasant Vi (6, 'Drake', 13567, 'XII-C', '67, Alpha Apartments',	n', 9818486839) ock, GK-1', 9819395868) , GK-1', 9813456868) har', 9811325868)
Student Details	
1. Showing the list of Students	
2. Add New Students 3. Search Student	
4. Update Student	
5. Delete Student	
6. Exit	
Enter your choice: 5 Enter AdmnNo. of the student to be deleted: 13567 Record deleted!!	
Student Details	
Student Details	
1. Showing the list of Students	
2. Add New Students	
3. Search Students	
4. Update Student	
5. Delete Student	
6. Exit	

```
Enter your choice: 6
        Welcome To Student Management System
1. Student Details
Academic Details
3. Fee Details
4. Library Details
5. Exit
_____
Enter your choice (1-5): 2
_____
Academic Details
_____
1. Showing the academic details of students
2. Add Students
3. Search Student
4. Update Student
Delete Student
6. Exit
Enter your choice: 1
(1, 'Parth Samthaan', 13670, 94, 'A', 'Pass')
(2, 'Aastha Oberoi', 13675, 88, 'B', 'Pass')
(3, 'Shruti Jaisinghaani', 14380, 24, 'F', 'Fail')
(4, 'Raghav Agnihotri', 14560, 71, 'C', 'Pass')
(5, 'Tanisha Walia', 14567, 69, 'D', 'Pass')
 -----
Academic Details
1. Showing the academic details of students
Add Students
3. Search Student
4. Update Student
5. Delete Student
6. Exit
_____
Enter your choice: 2
Enter Roll No.: 6
Enter Name: Drake
Enter Admission No.: 14677
Enter Average Marks: 78
Enter Grade: C
Enter Status: Pass
Record saved!!
  -----
Academic Details
_____
 1. Showing the academic details of students
```

2. Add Students

```
3. Search Student
4. Update Student
5. Delete Student
6. Exit
______
Enter your choice: 6
______
          Welcome To Student Management System
______
1. Student Details
2. Academic Details
3. Fee Details
4. Library Details
5. Exit
Enter your choice (1-5): 3
-----
Fee Details
_____
1. Showing the Fee details of students
2. Add Students
3. Search Student
4. Update Student
5. Delete Student
6. Exit
Enter your choice: 1
(13670, 13000, 'No', 0)
(13675, 13500, 'Yes', 100)
(14380, 15000, 'Yes', 100)
(14560, 12000, 'No', 0)
(14567, 12500, 'No', 0)
______
Fee Details
1. Showing the Fee details of students
2. Add Students
3. Search Student
4. Update Student
5. Delete Student
6. Exit
______
Enter your choice: 3
Enter AdmnNo. of the student to be searched: 14567
[(14567, 12500, 'No', 0)]
-----
_____
Fee Details
______
1. Showing the Fee details of students
2. Add Students
3. Search Student
4. Update Student
```

```
5. Delete Student
6. Exit
_____
Enter your choice: 6
_____
_____
         Welcome To Student Management System
______
1. Student Details
Academic Details
Fee Details
4. Library Details
5. Exit
_____
Enter your choice (1-5): 4
_____
_____
Library Details
_____
_____
1. Showing the Library details of students
2. Add Students
3. Search Student
4. Update Student
5. Delete Student
6. Exit
_____
Enter your choice: 1
(13670, 'Fault in our stars', 'No', 10)
(13675, 'Angels and Demons', 'Yes', 0)
(13675, 'Digital Fortress', 'No', 10)
(14560, 'Harry Potter Series', 'No', 10)
(14567, 'Alchemist', 'No', 10)
(14567, 'Divergent', 'Yes', 0)
(14380, 'Insurgent', 'Yes', 0)
._____
Library Details
_____
_____
1. Showing the Library details of students
2. Add Students
3. Search Student
4. Update Student
5. Delete Student
6. Exit
```

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En	cer your choice: 6			
		Student	Management	System
	Student Details			
2.	Academic Details			
3.	Fee Details			
4.	Library Details			
-				
5.	Exit cer your choice(1-5): 6			
5.  En	cer your choice(1-5): 6	1		
5. En In	cer your choice(1-5): 6 valid choice!! Try again  Welcome To	Student	Management	 System
5. En In	cer your choice(1-5): 6	Student	Management	 System
5. En In 	cer your choice(1-5): 6 valid choice!! Try again Welcome To	Student	Management	 System
5. En In  1. 2.	ter your choice(1-5): 6 valid choice!! Try again  Welcome To  Student Details	Student	Management	 System
5. En In  1. 2.	ter your choice(1-5): 6 valid choice!! Try again  Welcome To  Student Details Academic Details	Student	Management	 System

>>>