



SCHOOL MANGEMENT SYSTEM

Database Project

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Submitted To
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Database Project

School Management System

Introduction :

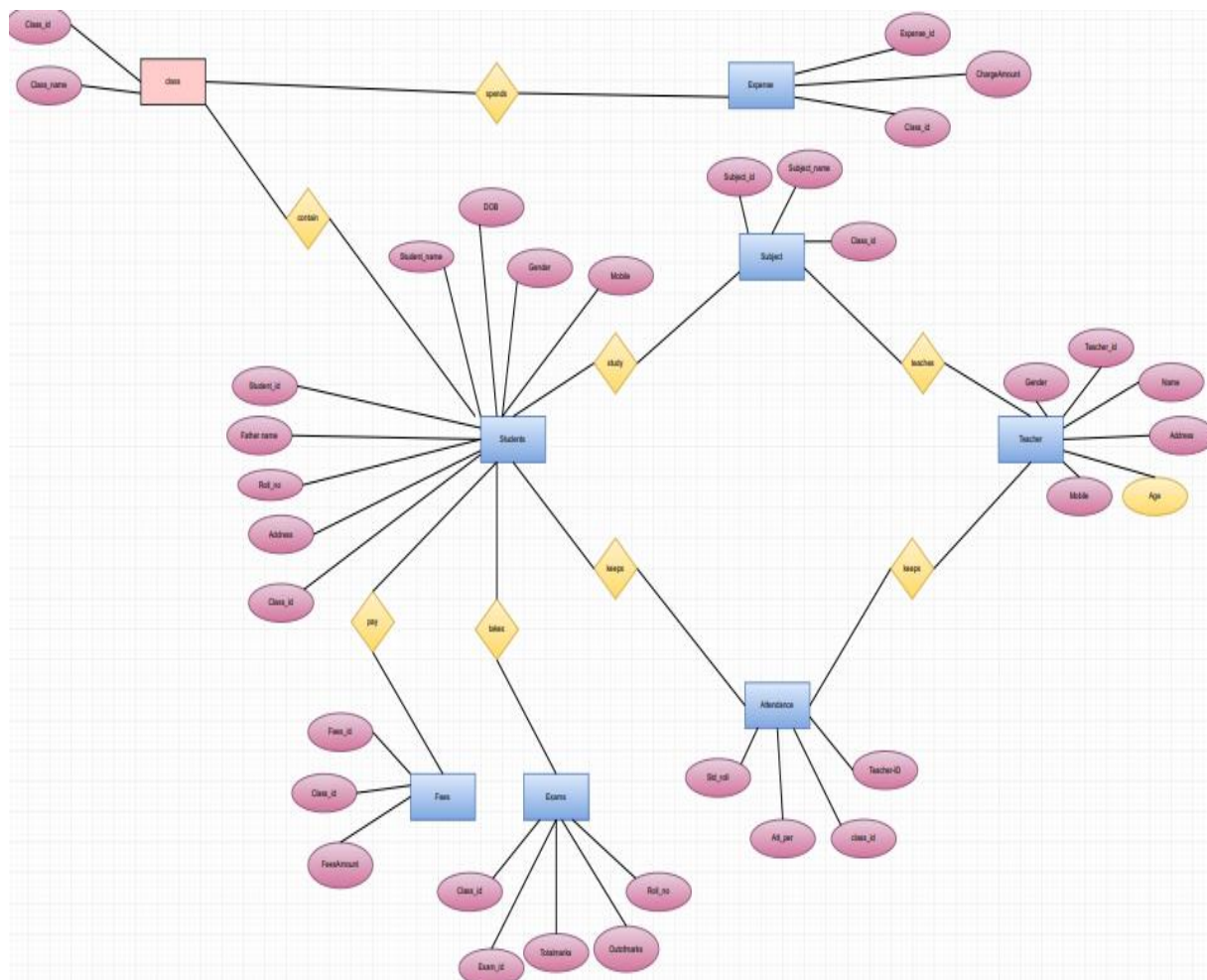
School Management System is an information system to manage school related data and transactions. It contains various actors for example students, staff, teachers, parents etc.

Database Information :

The details of project are given below :

There are total 11 number of tables in my project :

RE Diagram :



Tables :

-----Table 1

```
Create Table Class(  
Class_id int,  
Class_name varchar(45) null ,  
)  
insert into Class values(1,'1st');  
insert into Class values(2,'2nd');  
insert into Class values(3,'3rd');  
insert into Class values(4,'4rth');  
insert into Class values(5,'5th');  
  
Select *from Class;
```

Output :

Results		Messages
	Class_id	Class_name
1	1	1st
2	2	2nd
3	3	3rd
4	4	4rth
5	5	5th

-----Table 2

```
Create Table Subject (  
Subject_id int ,  
Class_id int ,  
Subject_name varchar (45),  
)  
Insert into Subject values(01,1,'English');  
Insert into Subject values(01,2,'English');  
Insert into Subject values(01,3,'English');  
Insert into Subject values(01,4,'English');  
Insert into Subject values(01,5,'English');  
  
Insert into Subject values(02,1,'Urdu');  
Insert into Subject values(02,2,'Urdu');  
Insert into Subject values(02,3,'Urdu');  
Insert into Subject values(02,4,'Urdu');  
Insert into Subject values(02,5,'Urdu');  
  
Insert into Subject values(03,1,'Math');  
Insert into Subject values(03,2,'Math');  
Insert into Subject values(03,3,'Math');  
Insert into Subject values(03,4,'Math');  
Insert into Subject values(03,5,'Math');  
  
Insert into Subject values(04,1,'Drwing');  
Insert into Subject values(04,2,'Drawing');  
  
Insert into Subject values(05,3,'General Knowledge');  
Insert into Subject values(05,4,'General Knowledge');
```

```

Insert into Subject values(06,3,'Computer');
Insert into Subject values(06,4,'Computer');

Insert into Subject values(07,4,'History');
Insert into Subject values(07,5,'History');

Insert into Subject values(08,1,'Envoiremental Solutions');
Insert into Subject values(08,2,'Envoiremental Solutions');
Insert into Subject values(08,3,'Envoiremental Solutions');
Insert into Subject values(08,4,'Envoiremental Solutions');
Insert into Subject values(08,5,'Envoiremental Solutions');

Select * from Subject;

```

Output :

	Subject_id	Class_id	Subject_name
1	1	1	English
2	1	2	English
3	1	3	English
4	1	4	English
5	1	5	English
6	2	1	Urdu
7	2	2	Urdu
8	2	3	Urdu
9	2	4	Urdu
10	2	5	Urdu
11	3	1	Math
12	3	2	Math
13	3	3	Math
14	3	4	Math
15	3	5	Math
16	4	1	Drwing

17	4	2	Drawing
18	5	3	General Kno...
19	5	4	General Kno...
20	6	3.	Computer
21	6	4	Computer
22	7	4	History
23	7	5	History
24	8	1	Envoirement...
25	8	2	Envoirement...
26	8	3	Envoirement...
27	8	4	Envoirement...
28	8	5	Envoirement...

-----Table 3

```

Create Table Student (
Student_id int ,
S_Name varchar (50),
F_Name varchar (25),
DOB date ,
Gender varchar(30),
Mobile varchar (40),
Roll_No varchar (30),
Adrs varchar(80),
Class_id int ,
)
Insert into Student values(11, 'Eman', 'Ali', '2002/09/03', 'Female', '0300-1537728', '064', 'Ghakkar', 1);
Insert into Student values(12, 'Zain', 'Ahmed', '2001/08/02', 'Male', '0305-1533428', '061', 'Gujranwala', 1);
Insert into Student values(13, 'Ali', 'Haider', '2003/04/04', 'Male', '0300-1531728', '031', 'Gujrat', 1);
Insert into Student values(14, 'Ahmed', 'Zain', '2004/01/01', 'Male', '0344-1531799', '099', 'Faislabad', 1);
Insert into Student values(15, 'Haider', 'Yasir', '2003/03/05', 'Male', '0303-1599728', '100', 'Gujrat', 1);

Insert into Student values(16, 'Babar', 'Yasir', '2003/05/10', 'Male', '0300-3538828', '041', 'Lahore', 2);
Insert into Student values(17, 'Fahad', 'Zain', '2004/09/11', 'Male', '0308-1578996', '021', 'Islamabad', 2);
Insert into Student values(18, 'Zainab', 'Saif', '2005/03/12', 'Female', '0301-1534428', '076', 'Lahore', 2);
Insert into Student values(19, 'Ayra', 'Fahad', '2003/04/13', 'Female', '0341-1531700', '033', 'Gujrat', 2);
Insert into Student values(20, 'Akmal', 'Babar', '2003/08/14', 'Male', '0346-1537622', '032', 'Gill wala', 2);

Insert into Student values(21, 'Amina', 'Yasir', '2001/04/16', 'Female', '0345-1537728', '091', 'Ghakkar', 3);
Insert into Student values(22, 'Haram', 'Babar', '2002/08/15', 'Female', '0333-4437799', '050', 'Gujrat', 3);

```

```

Insert into Student values(23,'Fajar','Anwar','2000/09/17','Female','0309-0237710','051','Lalmusa',3);
Insert into Student values(24,'Ali','Ahmed','2003/03/18','Male','0300-1531711','035','Alighar',3);
Insert into Student values(25,'Ali','Zahid','2004/01/19','Male','0301-1531712','039','Sialkoat',3);

Insert into Student values(26,'Eman','Zain','2003/09/25','Female','0300-1537728','066','Ghakkar',4);
Insert into Student values(27,'Eman','Ali','2002/08/21','Female','0301-1530028','067','Ghakkar',4);
Insert into Student values(28,'Awais','Baber','2001/09/22','Male','0340-1538828','070','Gujranwala',4);
Insert into Student values(29,'Ahil','Fahad','2004/04/23','Male','0341-1539928','081','Gujrat',4);
Insert into Student values(30,'Abeera','Nabeel','2001/04/28','Femle','0300-1531128','092','Gujrat',4);

Insert into Student values(31,'Ayzal','Ali','2001/04/20','Female','0331-7537728','100','Hafizabad',5);
Insert into Student values(32,'Amal','Ahmed','2002/05/24','Female','0333-8537700','101','Rahwali',5);
Insert into Student values(33,'Amal','Muneeb','2004/02/26','Female','0332-9537720','178','Sialkot',5);
Insert into Student values(34,'Ayesha','Ali','2003/11/27','Female','0300-1531728','099','Gujrat',5);
Insert into Student values(35,'Mubeen','Zain','2004/09/29','Female','0345-1531728','012','Ghakhar',5);

Select * from Student;

```

Output :

	Student_id	S_Name	F_Name	DOB	Gender	Mobile	Roll_No	Adrs	Class_id
1	11	Eman	Ali	2002-09-03	Female	0300-1537728	064	Ghakkar	1
2	12	Zain	Ahmed	2001-08-02	Male	0305-1533428	061	Gujranwala	1
3	13	Ali	Haider	2003-04-04	Male	0300-1531728	031	Gujrat	1
4	14	Ahmed	Zain	2004-01-01	Male	0344-1531799	099	Faislabad	1
5	15	Haider	Yasir	2003-03-05	Male	0303-1599728	100	Gujrat	1
6	16	Babar	Yasir	2003-05-10	Male	0300-3538828	041	Lahore	2
7	17	Fahad	Zain	2004-09-11	Male	0308-1578996	021	Islamabad	2
8	18	Zainab	Saif	2005-03-12	Female	0301-1534428	076	Lahore	2
9	19	Ayra	Fahad	2003-04-13	Female	0341-1531700	033	Gujrat	2
10	20	Akmal	Babar	2003-08-14	Male	0346-1537622	032	Gill wala	2
11	21	Amina	Yasir	2001-04-16	Female	0345-1537728	091	Ghakkar	3
12	22	Haram	Babar	2002-08-15	Female	0333-4437799	050	Gujrat	3
13	23	Fajar	Anwar	2000-09-17	Female	0309-0237710	051	Lalmusa	3
14	24	Ali	Ahmed	2003-03-18	Male	0300-1531711	035	Alighar	3
15	25	Ali	Zahid	2004-01-19	Male	0301-1531712	039	Sialkoat	3
16	26	Eman	Zain	2003-09-25	Female	0300-1537728	066	Ghakkar	4
17	27	Eman	Ali	2002-08-21	Female	0301-1530028	067	Ghakkar	4

18	28	Awais	Baber	2001-09-22	Male	0340-1538828	070	Gujranwala	4
19	29	Ahil	Fahad	2004-04-23	Male	0341-1539928	081	Gujrat	4
20	30	Abeera	Nabeel	2001-04-28	Femle	0300-1531128	092	Gujrat	4
21	31	Ayzal	Ali	2001-04-20	Female	0331-7537728	100	Hafizabad	5
22	32	Amal	Ahmed	2002-05-24	Female	0333-8537700	101	Rahwali	5
23	33	Amal	Muneeb	2004-02-26	Female	0332-9537720	178	Sialkot	5
24	34	Ayesha	Ali	2003-11-27	Female	0300-1531728	099	Gujrat	5
25	35	Mubeen	Zain	2004-09-29	Female	0345-1531728	012	Ghakhar	5

-----Table 4

```

Create Table Teacher (
Teacher_id int ,
Name varchar (50),
Age int,
Gender varchar(30),
Mobile varchar (40),
Adrs varchar(80),
)
Insert into Teacher values(41, 'Rameeza', 35, 'Female', '0333-1567728', 'Ghakkar');
Insert into Teacher values(42, 'Ammara', 39, 'Female', '0305-4533428', 'Gujranwala');
Insert into Teacher values(43, 'Saleha', 40, 'Female', '0332-8539728', 'Gujrat');
Insert into Teacher values(44, 'Maryam', 34, 'Female', '0344-1531720', 'Ghakkar');
Insert into Teacher values(45, 'Ayesha', 46, 'Female', '0341-7531799', 'Faislabad');
Insert into Teacher values(46, 'Amal', 39, 'Female', '0300-7599728', 'Taxila');
Insert into Teacher values(47, 'Zainab', 46, 'Female', '0300-7599728', 'Hafizabad');
Insert into Teacher values(48, 'Amina', 40, 'Female', '0331-7599728', 'Sialkot');

```

```
Select * from Teacher;
```

Output :

Results		Messages				
	Teacher_id	Name	Age	Gender	Mobile	Adrs
1	41	Rameeza	35	Female	0333-1567728	Ghakkar
2	42	Ammara	39	Female	0305-4533428	Gujranwala
3	43	Saleha	40	Female	0332-8539728	Gujrat
4	44	Maryam	34	Female	0344-1531720	Ghakkar
5	45	Ayesha	46	Female	0341-7531799	Faislabad
6	46	Amal	39	Female	0300-7599728	Taxila
7	47	Zainab	46	Female	0300-7599728	Hafizabad
8	48	Amina	40	Female	0331-7599728	Sialkot

-----Table 5

```

Create Table TeacherSubject(
Class_id int ,
Subject_id int ,
Teacher_id int ,
)
Insert into TeacherSubject values(1,01,41);

```

```

Insert into TeacherSubject values(2,01,41);
Insert into TeacherSubject values(3,01,41);
Insert into TeacherSubject values(4,01,41);
Insert into TeacherSubject values(5,01,41);

Insert into TeacherSubject values(1,02,42);
Insert into TeacherSubject values(2,02,42);
Insert into TeacherSubject values(3,02,42);
Insert into TeacherSubject values(4,02,42);
Insert into TeacherSubject values(5,02,42);

Insert into TeacherSubject values(1,03,43);
Insert into TeacherSubject values(2,03,43);
Insert into TeacherSubject values(3,03,43);
Insert into TeacherSubject values(4,03,43);
Insert into TeacherSubject values(5,03,43);

Insert into TeacherSubject values(1,04,44);
Insert into TeacherSubject values(2,04,44);

Insert into TeacherSubject values(3,05,45);
Insert into TeacherSubject values(4,05,45);

Insert into TeacherSubject values(3,06,46);
Insert into TeacherSubject values(4,06,46);

Insert into TeacherSubject values(4,07,47);
Insert into TeacherSubject values(5,07,47);

Insert into TeacherSubject values(1,08,48);
Insert into TeacherSubject values(2,08,48);
Insert into TeacherSubject values(3,08,48);
Insert into TeacherSubject values(4,08,48);
Insert into TeacherSubject values(5,08,48);

Select * from TeacherSubject;

```

Output :

Results		Messages	
	Class_id	Subject_id	Teacher_id
1	1	1	41
2	2	1	41
3	3	1	41
4	4	1	41
5	5	1	41
6	1	2	42
7	2	2	42
8	3	2	42
9	4	2	42
10	5	2	42
11	1	3	43
12	2	3	43
13	3	3	43
14	4	3	43
15	5	3	43
16	1	4	44
17	2	4	44

18	3	5	45
19	4	5	45
20	3	6	46
21	4	6	46
22	4	7	47
23	5	7	47
24	1	8	48
25	2	8	48
26	3	8	48
27	4	8	48
28	5	8	48

-----Table 6

```
Create Table TeacherAttendance(
Teacher_id int,
Att_per varchar(30),
)
Insert into TeacherAttendance values(41, '80%');
Insert into TeacherAttendance values(42, '85%');
Insert into TeacherAttendance values(43, '71%');
Insert into TeacherAttendance values(44, '60%');
Insert into TeacherAttendance values(45, '70%');
Insert into TeacherAttendance values(46, '89%');
Insert into TeacherAttendance values(47, '90%');
Insert into TeacherAttendance values(48, '100%');

Select * from TeacherAttendance;
```

Output :

	Teacher_id	Att_per
1	41	80%
2	42	85%
3	43	71%
4	44	60%
5	45	70%
6	46	89%
7	47	90%
8	48	100%

-----Table 7

```

Create Table StudentAtt(
Roll_No varchar(20),
Class_id int,
Att_per INT,
);
Insert into StudentAtt values('064',1,80);
Insert into StudentAtt values('061',1,81);
Insert into StudentAtt values('031',1,85);
Insert into StudentAtt values('099',1,50);
Insert into StudentAtt values('100',1,60);

Insert into StudentAtt values('041',2,61);
Insert into StudentAtt values('021',2,65);
Insert into StudentAtt values('076',2,45);
Insert into StudentAtt values('033',2,78);
Insert into StudentAtt values('032',2,90);

Insert into StudentAtt values('091',3,92);
Insert into StudentAtt values('050',3,85);
Insert into StudentAtt values('051',3,75);
Insert into StudentAtt values('035',3,65);
Insert into StudentAtt values('039',3,80);

Insert into StudentAtt values('066',4,82);
Insert into StudentAtt values('067',4,72);
Insert into StudentAtt values('070',4,60);
Insert into StudentAtt values('081',4,65);
Insert into StudentAtt values('092',4,90);

Insert into StudentAtt values('100',5,92);
Insert into StudentAtt values('101',5,80);
Insert into StudentAtt values('178',5,82);
Insert into StudentAtt values('099',5,92);
Insert into StudentAtt values('012',5,62);

Select * from StudentAtt;

```

Output :

Results		Messages	
	Roll_No	Class_id	Att_per
1	064	1	80
2	061	1	81
3	031	1	85
4	099	1	50
5	100	1	60
6	041	2	61
7	021	2	65
8	076	2	45
9	033	2	78
10	032	2	90
11	091	3	92
12	050	3	85
13	051	3	75
14	035	3	65
15	039	3	80
16	066	4	82
17	067	4	72

18	070	4	60
19	081	4	65
20	092	4	90
21	100	5	92
22	101	5	80
23	178	5	82
24	099	5	92
25	012	5	62

-----Table 8

```

Create Table Fees(
Fees_id int ,
Class_id int ,
FeesAmount int ,
)
Insert into Fees values(51,1,20000);
Insert into Fees values(52,2,25000);
Insert into Fees values(53,3,30000);
Insert into Fees values(54,4,35000);
Insert into Fees values(55,5,40000);

Select * from Fees;

```

Output :

	Fees_id	Class_id	FeesAmount
1	51	1	20000
2	52	2	25000
3	53	3	30000
4	54	4	35000
5	55	5	40000

-----Table 9

```

Create Table Expense (
Expense_id int ,
Class_id int ,
ChargeAmount int ,
)
Insert into Expense values(61,1,150000);
Insert into Expense values(62,2,130000);
Insert into Expense values(63,3,150000);

```

```

Insert into Expense values(64,4,100000);
Insert into Expense values(65,5,100000);
Select * from Expense;

```

Output :

	Expense_id	Class_id	ChargeAmount
1	61	1	150000
2	62	2	130000
3	63	3	150000
4	64	4	100000
5	65	5	100000

-----Table 10

```

Create Table Principal(
Name varchar(30),
Grade int,
Designation varchar(30),
)
Insert into Principal values('Ali',17,'Principal');
Insert into Principal values('Ahmed',16,'Wise Principal');

Select * from Principal;

```

Output :

	Name	Grade	Designation
1	Ali	17	Principal
2	Ahmed	16	Wise Principal

-----Table 11

```

Create Table Exam (
Exam_id int ,
Class_id int ,
Roll_No varchar(20),
TotalMarks int ,
OutOfMarks int ,
)
Insert into Exam values(61,1,'064',800,750);
Insert into Exam values(62,1,'061',800,780);
Insert into Exam values(63,1,'031',800,650);

```

```

Insert into Exam values(64,1,'099',800,701);
Insert into Exam values(65,1,'100',800,756);
Insert into Exam values(66,1,'041',800,91);
Insert into Exam values(67,1,'021',800,761);
Insert into Exam values(68,1,'076',800,345);
Insert into Exam values(69,1,'033',800,764);
Insert into Exam values(70,1,'032',800,745);
Insert into Exam values(71,1,'091',800,234);
Insert into Exam values(72,1,'050',800,545);
Insert into Exam values(73,1,'051',800,764);
Insert into Exam values(74,1,'035',800,356);
Insert into Exam values(75,1,'039',800,654);
Insert into Exam values(76,1,'066',800,745);
Insert into Exam values(77,1,'067',800,567);
Insert into Exam values(78,1,'070',800,790);
Insert into Exam values(79,1,'081',800,795);
Insert into Exam values(80,1,'092',800,542);
Insert into Exam values(81,1,'100',800,501);
Insert into Exam values(82,1,'101',800,583);
Insert into Exam values(83,1,'178',800,537);
Insert into Exam values(84,1,'099',800,536);
Insert into Exam values(85,1,'012',800,436);

```

```
Select * from Exam;
```

Output :

Results		Messages			
	Exam_id	Class_id	Roll_No	TotalMarks	OutOfMarks
1	61	1	064	800	750
2	62	1	061	800	780
3	63	1	031	800	650
4	64	1	099	800	701
5	65	1	100	800	756
6	66	1	041	800	91
7	67	1	021	800	761
8	68	1	076	800	345
9	69	1	033	800	764
10	70	1	032	800	745
11	71	1	091	800	234
12	72	1	050	800	545
13	73	1	051	800	764
14	74	1	035	800	356
15	75	1	039	800	654
16	76	1	066	800	745
17	77	1	067	800	567
18	78	1	070	800	790
19	79	1	081	800	795
20	80	1	092	800	542
21	81	1	100	800	501
22	82	1	101	800	583
23	83	1	178	800	537
24	84	1	099	800	536
25	85	1	012	800	436

-----Count number of students in class -----

```
CREATE PROCEDURE proc_1
AS
select count(Student_id) from Student where Class_id=2;
EXEC proc_1
```

Results Messages	
(No column name)*	
1	5

-----count how many students in school-----

```
CREATE PROCEDURE proc_2
AS
select count(Student_id) from Student;
EXEC proc_2
```

Results Messages	
(No column name)	
1	25

-----count how many teachers in school-----

```
CREATE PROCEDURE proc_3
AS
select count(Teacher_id) from Teacher;
EXEC proc_3
```

Results Messages	
(No column name)	
1	8

-----Particular student's data and number of students according to City---

```
CREATE PROCEDURE proc_6
AS
Select count(Student_id) as 'Number of Students' From Student
Where Adrs IN('Gujranwala','Lahore');
EXEC proc_6
```

Results Messages	
	Number of Students
1	4

-----Heightest Marks Calculate in order-----

```
CREATE PROCEDURE proc_7
AS
select *from Exam where OutOfMarks Between 780 AND 800 order by OutOfMarks desc;
EXEC proc_7
```

Results

Messages

	Exam_id	Class_id	Roll_No	TotalMarks	OutOfMarks
1	79	1	081	800	795
2	78	1	070	800	790
3	62	1	061	800	780

-----Find Fail students-----

```
CREATE PROCEDURE proc_8
AS
select S_Name as 'fail students' from Student inner join Exam
on Student.Roll_No=Exam.Roll_No
where Exam.OutOfMarks < 300;
EXEC proc_8
```

Results Messages	
	fail students
1	Babar
2	Amina

-----show total marks---

```
CREATE PROCEDURE proc_9
AS
select TotalMarks from Exam ;
EXEC proc_9
```

Results Messages	
	TotalMarks
1	800
2	800
3	800
4	800
5	800
6	800
7	800
8	800
9	800
10	800
11	800
12	800
13	800
14	800
15	800
16	800
17	800

18	800
19	800
20	800
21	800
22	800
23	800
24	800
25	800

-----Attendance greater than 90---

```

CREATE PROCEDURE proc_10
AS
select Student.S_Name,StudentAtt.Att_per from Student inner join StudentAtt
on Student.Roll_No=StudentAtt.Roll_No
where StudentAtt.Att_per > 90;
EXEC proc_10

```

Results Messages		
	S_Name	Att_per
1	Ahmed	92
2	Haider	92
3	Amina	92
4	Ayzal	92
5	Ayesha	92

-----Total Expenses of school-----

```

CREATE PROCEDURE proc_11
AS
Select sum(Expense.ChargeAmount) as 'Total expenses' from Expense;
EXEC proc_11

```


Results Messages	
	Total expenses
1	630000

-----show principal data---

```
CREATE PROCEDURE proc_12
AS
select *from Principal where Principal.Designation='Principal';
EXEC proc_12
```

Results

Messages

	Name	Grade	Designation
1	Ali	17	Principal

-----show fees of a prticular class---

```
CREATE PROCEDURE proc_13
AS
select Class.Class_name,Fees.FeesAmount from Fees inner join Class
on Class.Class_id=Fees.Class_id
where Class.Class_id=4;
EXEC proc_13
```

Results

Messages

	Class_name	FeesAmount
1	4rth	35000

-----Particular class's subject names and class name-----

```
CREATE PROCEDURE proc_14
AS
select Subject.Subject_name,Class.Class_name from Class inner join Subject
on Subject.Class_id=Class.Class_id
where Class.Class_id=3;
EXEC proc_14
```

Results Messages

	Subject_name	Class_name
1	English	3rd
2	Urdu	3rd
3	Math	3rd
4	General Knowledge	3rd
5	Computer	3rd
6	Enviroemental Solutions	3rd

-----number of subjects of a particular class-----

```
CREATE PROCEDURE proc_15
AS
select COUNT(subject.Subject_id) from Subject where Class_id=4;
EXEC proc_15
```

Results Messages	
	(No column name)
1	7

-----A particular teacher teaches how many subjects

```
Create Procedure proc_16
AS
select Teacher.Name, count(TeacherSubject.Subject_id) from Teacher
inner join TeacherSubject
on Teacher.Teacher_id=TeacherSubject.Teacher_id
where Teacher.Teacher_id=42
group by Teacher.Name;
EXEC proc_16
```

Results		Messages	
	Name	(No column name)	
1	Ammara	5	