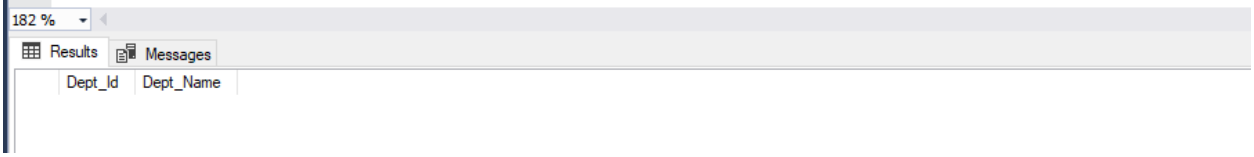
SQL ASSIGNMENT

MID:M1082972, Name: B Karthik

Assignment-1

1.

```
Select *From department;
```




```
Insert into Department values(1001, 'Stats');
Insert into Department values(1002, 'Maths');
Insert into Department values(1003, 'Computer');
```

```
(1 row affected)

(1 row affected)

(1 row affected)

Completion time: 2022-04-03T17:37:19.8557596+00:00
```

```
Select *From department;
```

182 %

Results | Messages

	Dept_Id	Dept_Name
1	1001	Stats
2	1002	Maths
3	1003	Computer

Semister

```
Select *From Semester;
```

182 %

Results | Messages

Sem_Id	Sem_Name	Academic_Year

```
Select *From Semester
```

100 %

Results | Messages

	Sem_Id	Sem_Name	Academic_Year
1	4	Odd	2021
2	5	Even	2021
3	6	Even	2022
4	7	Odd	2022

Staff

```
Insert into Staff values( 'Burada','Karthik','Science Teacher','1988-03-12',1002,'2021-03-12',2
Insert into Staff values( 'Kovvadi','Madhu','English Teacher','1989-03-12',1003,'2021-03-12',32
Insert into Staff values( 'Burada','Santhosh','social Teacher','1988-03-12',1001,'2021-03-12',2

Select *From Staff;
```

Results | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal
1	Burada	Karthik	Science Teacher	1988-03-12	1002	2021-03-12	23	20210
2	Kovvadi	Madhu	English Teacher	1989-03-12	1003	2021-03-12	32	21210
3	Burada	Santhosh	social Teacher	1988-03-12	1001	2021-03-12	29	23210

Students

```
Insert into Students values( 'Burada1','Karthik1','1990-03-12','2021-03-12',1001,
'Sri Sai Nilayam','Balaji Nagar','Hyderabad','500013',1);
Insert into Students values( 'Burada1','Vasau','1991-03-12','2021-03-20',1003,
'Sri Nilayam','Balajipur','Hyderabad','500013',3);
Insert into Students values( 'Valurouth','Karthik','1990-08-12','2022-03-12',1002,
'Sai Nilayam','Indira Nagar','Hyderabad','500013',2);
Select *From Students;
```

182 %

Results | Messages

	St_Id	St_FName	St_LName	DOB	Join_Date	St_Dept_Id	House_Name	Street_Name	City	Zipcode	Staff_Incharge_Id
1	2	Burada1	Karthik1	1990-03-12	2021-03-12	1001	Sri Sai Nilayam	Balaji Nagar	Hyderabad	500013	1
2	3	Burada1	Vasau	1991-03-12	2021-03-20	1003	Sri Nilayam	Balajipur	Hyderabad	500013	3
3	4	Valurouth	Karthik	1990-08-12	2022-03-12	1002	Sai Nilayam	Indira Nagar	Hyderabad	500013	2

3

Course_details

```
Insert into Course_Details values(11,'BSc',5,1001,'Regular');
Insert into Course_Details values(12,'BA',4,1003,'Part time');
Insert into Course_Details values(13,'BCom',6,1002,'Regular');
Select *From Course_Details;
```

182 %

Results | Messages

	Course_Code	Course_Name	Sem_Id	Dept_Id	Course_Type
1	11	BSc	5	1001	Regular
2	12	BA	4	1003	Part time
3	13	BCom	6	1002	Regular

4

Student_marks

```
Insert into Students_Marks values(4,11,46,12,65,13,87,67);
Insert into Students_Marks values(5,12,65,12,76,13,87,67);
Insert into Students_Marks values(6,13,26,12,87,13,87,67);
Select *From Students_Marks;
```

182 %

Results | Messages

	St_Id	Sem_Id	Course_cod1	Course1_mar	Course_cod2	Course2_mar	Course_cod3	Course3_Mar	percen_Marks
1	1	4	11	46	12	65	13	87	67
2	2	5	12	65	12	76	13	87	67
3	3	6	13	26	12	87	13	87	67

Result_anaylsis

```
Insert into Result_Analysis values(12,98,4);
Insert into Result_Analysis values(13,54,6);
Insert into Result_Analysis values(11,76,5);
Select *From Result_Analysis;
```

182 %

Results | Messages

	Course_Code	Pass_Percent	Staff_Id
1	12	98	4
2	13	54	6
3	11	76	5

5.

```
Create Table Placement_Students(St_Id int primary key Not null,

                                St_Name Varchar(30) not null,
                                St_Dept_Id int not null,
                                St_Marks int not null);


insert into Placement_Students values (3, 'Suresh', 112,74);

Select *from Placement_Students
```

0 %

Results | Messages

	St_Id	St_Name	St_Dept_Id	St_Marks
1	3	Suresh	112	74

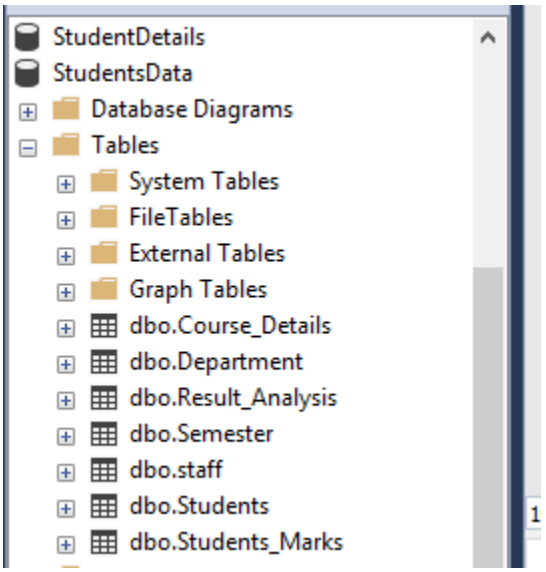
6.

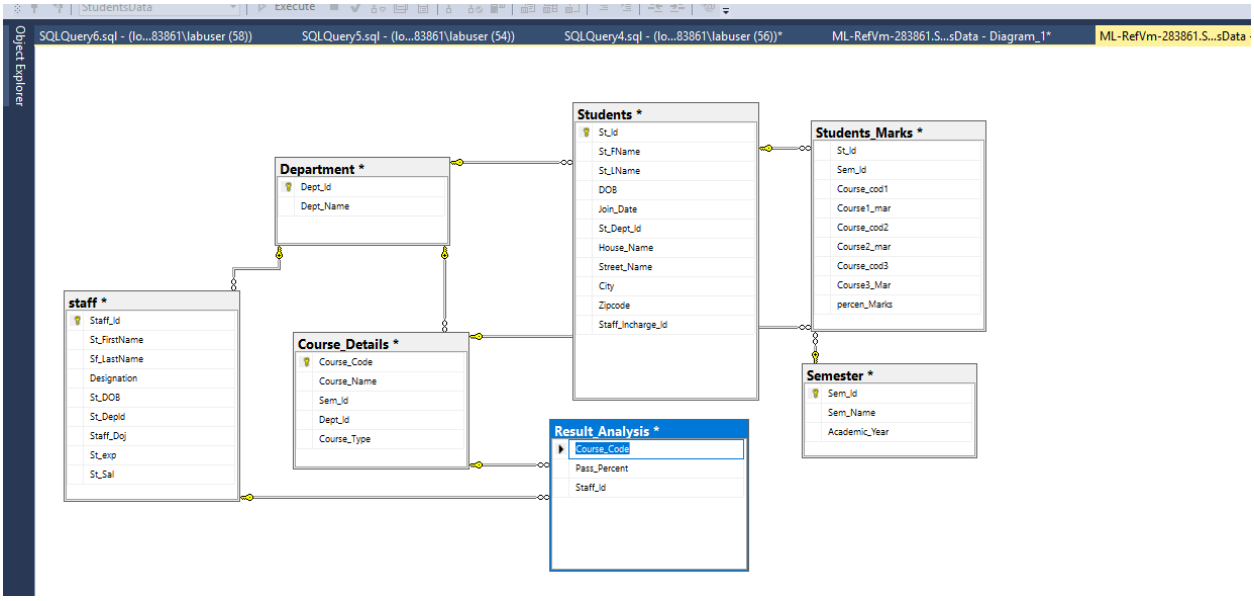
```
Exec Sp_rename 'STAFF','FACULTY';

Select *from faculty;
```

esults | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal
1	Burada	Karthik	Science Teacher	1988-03-12	1002	2021-03-12	23	20210
2	Kovvadi	Madhu	English Teacher	1989-03-12	1003	2021-03-12	32	21210
3	Burada	Santhosh	social Teacher	1988-03-12	1001	2021-03-12	29	23210

7.





Assignment-3

1.

```
Select *From department;
```

182 %

Results | Messages

Dept_Id	Dept_Name

```
Insert into Department values(1001, 'Stats');
Insert into Department values(1002, 'Maths');
Insert into Department values(1003, 'Computer');
```

182 %

Messages

```
(1 row affected)

(1 row affected)

(1 row affected)

Completion time: 2022-04-03T17:37:19.8557596+00:00
```

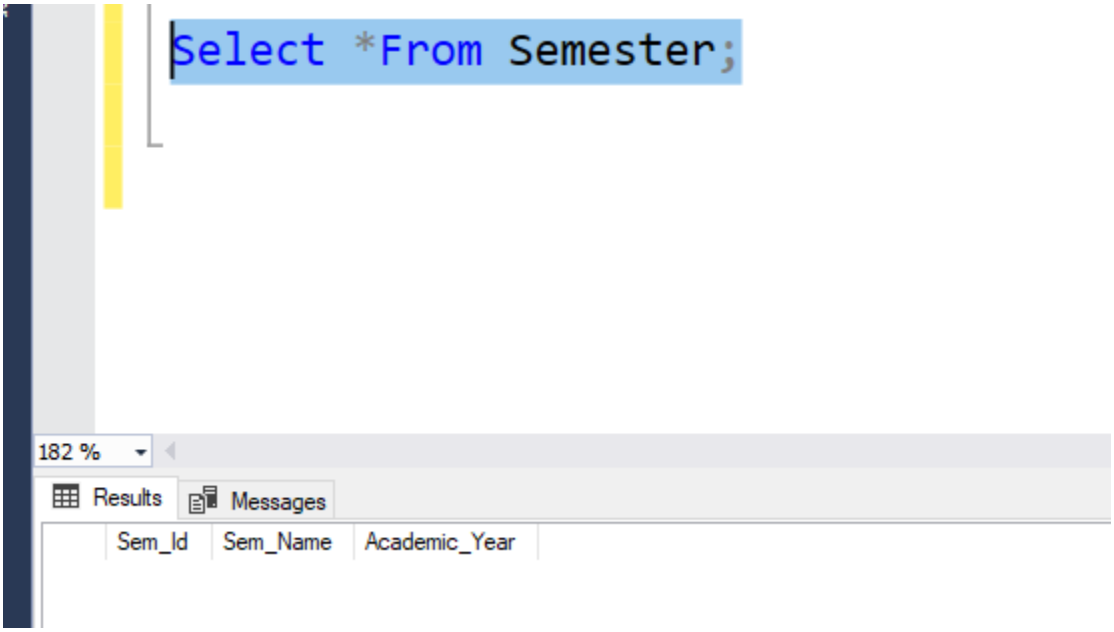
```
Select *From department;
```

182 %

Results | Messages

	Dept_Id	Dept_Name
1	1001	Stats
2	1002	Maths
3	1003	Computer

Semister


Select *From Semester;
182 %
Results
Messages
Sem_Id
Sem_Name
Academic_Year

```
Select *From Semester
```

100 %

Results | Messages

	Sem_Id	Sem_Name	Academic_Year
1	4	Odd	2021
2	5	Even	2021
3	6	Even	2022
4	7	Odd	2022

Staff

```
Insert into Staff values( 'Burada','Karthik','Science Teacher','1988-03-12',1002,'2021-03-12',2
Insert into Staff values( 'Kovvadi','Madhu','English Teacher','1989-03-12',1003,'2021-03-12',32
Insert into Staff values( 'Burada','Santhosh','social Teacher','1988-03-12',1001,'2021-03-12',2

Select *From Staff;
```

Results | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal
1	Burada	Karthik	Science Teacher	1988-03-12	1002	2021-03-12	23	20210
2	Kovvadi	Madhu	English Teacher	1989-03-12	1003	2021-03-12	32	21210
3	Burada	Santhosh	social Teacher	1988-03-12	1001	2021-03-12	29	23210

Students

```
Insert into Students values( 'Burada1','Karthik1','1990-03-12','2021-03-12',1001,
'Sri Sai Nilayam','Balaji Nagar','Hyderabad','500013',1);
Insert into Students values( 'Burada1','Vasau','1991-03-12','2021-03-20',1003,
'Sri Nilayam','Balajipur','Hyderabad','500013',3);
Insert into Students values( 'Valurouth','Karthik','1990-08-12','2022-03-12',1002,
'Sai Nilayam','Indira Nagar','Hyderabad','500013',2);
Select *From Students;
```

182 %

Results | Messages

	St_Id	St_FName	St_LName	DOB	Join_Date	St_Dept_Id	House_Name	Street_Name	City	Zipcode	Staff_Incharge_Id
1	2	Burada1	Karthik1	1990-03-12	2021-03-12	1001	Sri Sai Nilayam	Balaji Nagar	Hyderabad	500013	1
2	3	Burada1	Vasau	1991-03-12	2021-03-20	1003	Sri Nilayam	Balajipur	Hyderabad	500013	3
3	4	Valurouth	Karthik	1990-08-12	2022-03-12	1002	Sai Nilayam	Indira Nagar	Hyderabad	500013	2

3

Course_details

```
Insert into Course_Details values(11,'BSc',5,1001,'Regular');
Insert into Course_Details values(12,'BA',4,1003,'Part time');
Insert into Course_Details values(13,'BCom',6,1002,'Regular');
Select *From Course_Details;
```

182 %

Results | Messages

	Course_Code	Course_Name	Sem_Id	Dept_Id	Course_Type
1	11	BSc	5	1001	Regular
2	12	BA	4	1003	Part time
3	13	BCom	6	1002	Regular

4

Student_marks

```
Insert into Students_Marks values(4,11,46,12,65,13,87,67);
Insert into Students_Marks values(5,12,65,12,76,13,87,67);
Insert into Students_Marks values(6,13,26,12,87,13,87,67);
Select *From Students_Marks;
```

182 %

Results | Messages

	St_Id	Sem_Id	Course_cod1	Course1_mar	Course_cod2	Course2_mar	Course_cod3	Course3_Mar	percen_Marks
1	1	4	11	46	12	65	13	87	67
2	2	5	12	65	12	76	13	87	67
3	3	6	13	26	12	87	13	87	67

Result_anaylsis

```
Insert into Result_Analysis values(12,98,4);
Insert into Result_Analysis values(13,54,6);
Insert into Result_Analysis values(11,76,5);
Select *From Result_Analysis;
```

182 %

Results | Messages

	Course_Code	Pass_Percent	Staff_Id
1	12	98	4
2	13	54	6
3	11	76	5

5.

```
Create Table Placement_Students(St_Id int primary key Not null,

                                St_Name Varchar(30) not null,
                                St_Dept_Id int not null,
                                St_Marks int not null);


insert into Placement_Students values (3, 'Suresh', 112,74);

Select *from Placement_Students
```

0 %

Results | Messages

	St_Id	St_Name	St_Dept_Id	St_Marks
1	3	Suresh	112	74

6.

```
Exec Sp_rename 'STAFF','FACULTY';

Select *from faculty;
```

esults | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal
1	Burada	Karthik	Science Teacher	1988-03-12	1002	2021-03-12	23	20210
2	Kovvadi	Madhu	English Teacher	1989-03-12	1003	2021-03-12	32	21210
3	Burada	Santhosh	social Teacher	1988-03-12	1001	2021-03-12	29	23210

7.

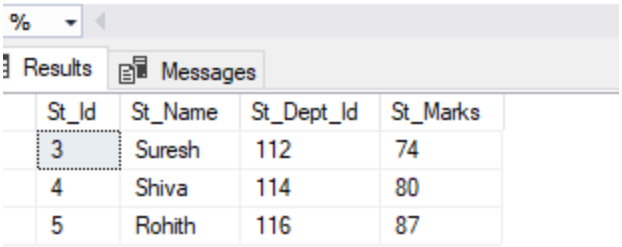
```
drop table Placement_Students;

Select *from placement_students;
```

0 % | Messages

```
Msg 208, Level 16, State 1, Line 12
Invalid object name 'placement_students'.

Completion time: 2022-04-04T03:33:14.6119026+00:00
```

8.

```
Select * from Placement_students;
```



Results | Messages

St_Id	St_Name	St_Dept_Id	St_Marks
3	Suresh	112	74
4	Shiva	114	80
5	Rohith	116	87

9.

```
update Students_Marks set [percentage_Marks]= (

Coalesce (course_1marks,0) +
Coalesce (course_2marks,0) +
Coalesce (course_3marks,0)
);
Select
(
coalesce(Course_1Marks  ,0,1) +
coalesce(Course_2Marks ,0,1) +
coalesce(Course_3Marks ,0,1)
)
```

10.

```
Alter table Course_Details Add Staff_Id integer , Foreign key(Staff_Id) References Staff(Staff_Id);
--Select * from course_details;

update course_details
set staff_id = 1001
where course_code = 11;

update course_details
set staff_id = 1002
where course_code = 12;

update course_details
set staff_id = 1010
where course_code = 13;

Select * from course_details;
```

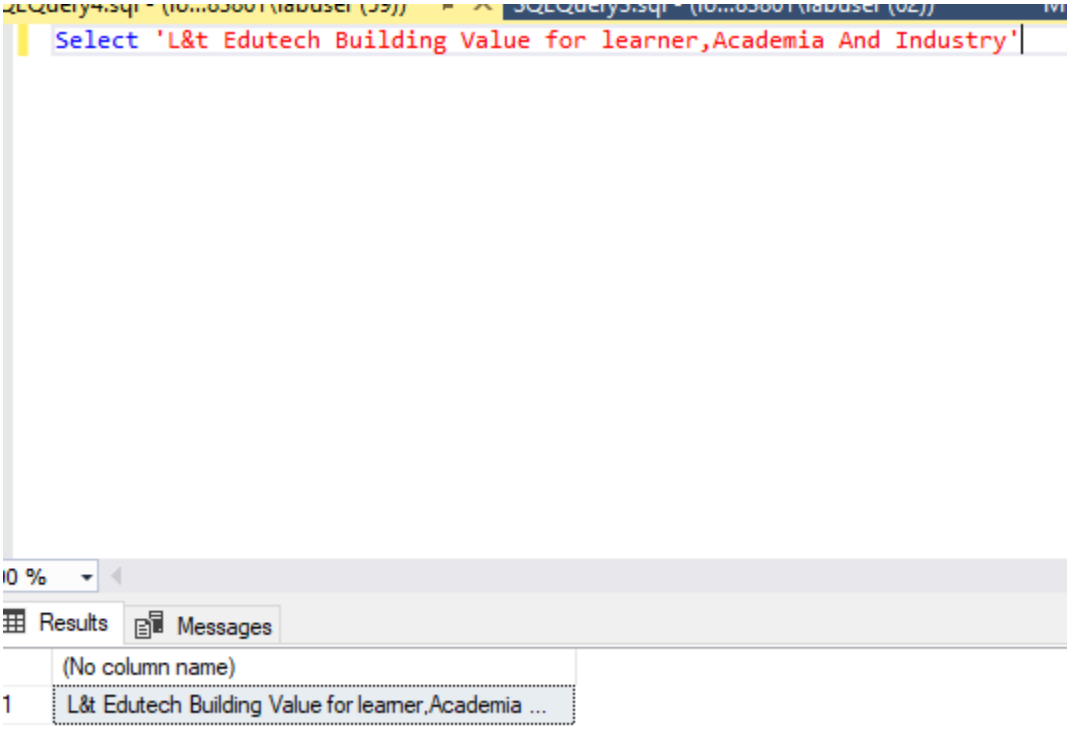
00 %

Results | Messages

	Course_Code	Course_Name	Sem_Id	Dept_Id	Course_Type	Staff_Id
1	11	BSc	5	1001	Regular	1001
2	12	BA	4	1003	Part time	1002
3	13	BCom	6	1002	Regular	1010

Assignment-4

1.



2.

```
Select 'L&t Edutech Building Value for learner,Academia And Industry

Select Lower ('I Am a Successful Man')
```

00 %

Results | Messages

	(No column name)
1	i am a successful man

3.

```
Select 'L&t Edutech Building Value for learner,Academia And Industry'

Select Lower ('I Am a Successful Man')

Select *From Students Order by St_Fname desc;
```

%

Results | Messages

St_Id	St_FName	St_LName	DOB	Join_Date	St_Dept_Id	House_Name	Street_Name	City	Zipcode	Staff_Incharge_Id
4	Valurouth	Karthik	1990-08-12	2022-03-12	1002	Sai Nilayam	Indira Nagar	Hyderabad	500013	2
2	Burada1	Karthik1	1990-03-12	2021-03-12	1001	Sri Sai Nilayam	Balaji Nagar	Hyderabad	500013	1
3	Burada1	Vasau	1991-03-12	2021-03-20	1003	Sri Nilayam	Balajipur	Hyderabad	500013	3

4.

```
Select *From Course_Details Order by Course_Name  desc;
```

Results | Messages

Course_Code	Course_Name	Sem_Id	Dept_Id	Course_Type	Staff_Id
11	BSc	5	1001	Regular	1001
13	BCom	6	1002	Regular	1010
12	BA	4	1003	Part time	1002

5.

```
Select SUBSTRING(ST_FName,1,3) From Students;
```

Results | Messages

(No column name)
Bur
Bur
Val

6.

```
select Distinct (Course_Name) From Course_Details;
```

100 %

Results | Messages

	Course_Name
1	BA
2	BCom
3	BSc

7.

```
(SELECT COUNT(S.ST_ID), DEPT_NAME
FROM STUDENT_MARKS SM, DEPARTMENT D,
STUDENTS S
WHERE SM.ST_ID=S.ST_ID
AND S.ST_DEPT_ID=D. DEPT_ID
AND SM. [PERCENTAGE_MARKS] >70
GROUP BY D.DEPT_NAME)
```

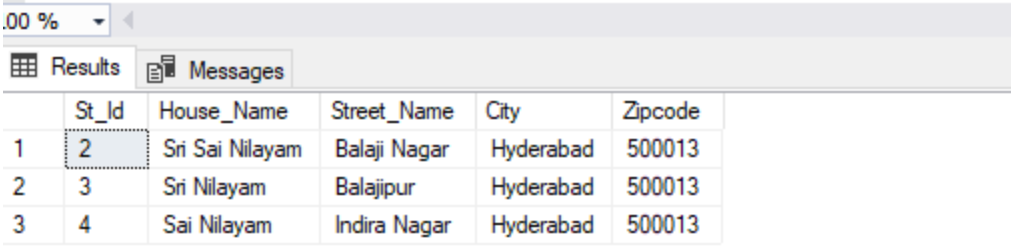
100 %

Results | Messages

	(No column name)	DEPT_NAME
1	1	Computer Science
2	1	Maths
3	1	Physics

8.

```
Select St_Id ,House_Name , Street_Name,City,Zipcode From students
```



Results | Messages

	St_Id	House_Name	Street_Name	City	Zipcode
1	2	Sri Sai Nilayam	Balaji Nagar	Hyderabad	500013
2	3	Sri Nilayam	Balajipur	Hyderabad	500013
3	4	Sai Nilayam	Indira Nagar	Hyderabad	500013

9.

```
Select St_Id ,House_Name , Street_Name,City,Zipcode From students


Select *From Faculty Where Sf_LastName Like '%e%';
```

100 %

Results | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal

10.

```
Select *From FACULTY;
Update FACULTY set St_Sal =55000 where St_Sal =20210;
```

Results | Messages

Staff_Id	St_FirstName	Sf_LastName	Designation	St_DOB	St_DepId	Staff_Doj	St_exp	St_Sal
1	Burada	Karthik	Science Teacher	1988-03-12	1002	2021-03-12	23	55000

11.

```
SELECT COUNT(ST_ID), ACADEMIC_YEAR
FROM STUDENT_MARKS SM
INNER JOIN SEMESTER S
ON S.SEM_ID = SM.SEM_ID
GROUP BY S.ACADEMIC_YEAR;
```

100 %

Results | Messages

	(No column name)	ACADEMIC_YEAR
1	1	2018-2019
2	1	2019-2020
3	1	2021-2022

12.

```
Select *From FACULTY;
Update FACULTY set St_Sal =55000 where St_Sal =20210;

Select*from Students where St_Id % 2= 0;
```

00 %

Results | Messages

	St_Id	St_FName	St_LName	DOB	Join_Date	St_Dept_Id	House_Name	Street_Name	City	Zipcode	Staff_Incharge_Id
1	2	Burada1	Karthik1	1990-03-12	2021-03-12	1001	Sri Sai Nilayam	Balaji Nagar	Hyderabad	500013	1
2	4	Valurouth	Karthik	1990-08-12	2022-03-12	1002	Sai Nilayam	Indira Nagar	Hyderabad	500013	2

Assignment-5

1.

```
CREATE PROCEDURE findTotalMarks(
    @S_id varchar (30)
      )
AS
BEGIN
SELECT ST_ID,
(
COALESCE (COURSE_1MARKS, 0)
+ COALESCE(COURSE_2MARKS, 0)
+ COALESCE(COURSE_3MARKS, 0)
)
TOTAL_MARKS
FROM STUDENT_MARKS
WHERE ST_ID= @s_id;
END;
EXEC findTotalMarks @s_id = '9101'
```

0 %

Results

```
Commands completed successfully.
```

2.

```
CREATE PROCEDURE [dbo].[findStudent](@reg_no int, @name varchar output)
AS
BEGIN
SELECT ST_FNAME
FROM STUDENTS WHERE ST_ID=@reg_no;
END
 GO
```

100 %

Messages

```
Commands completed successfully.
```

```
 DECLARE
@return_value int,
@name varchar(1)
EXEC @return_value = [dbo].[findStudent]
            @reg_no = 9104,
            @name = @name OUTPUT
```

100 %

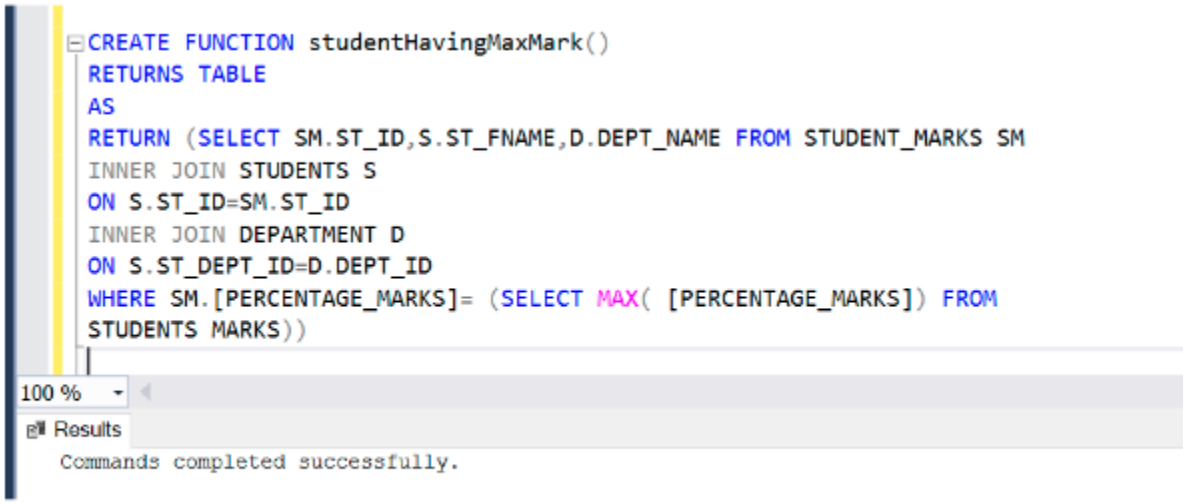
Results Messages

ST_FNAME

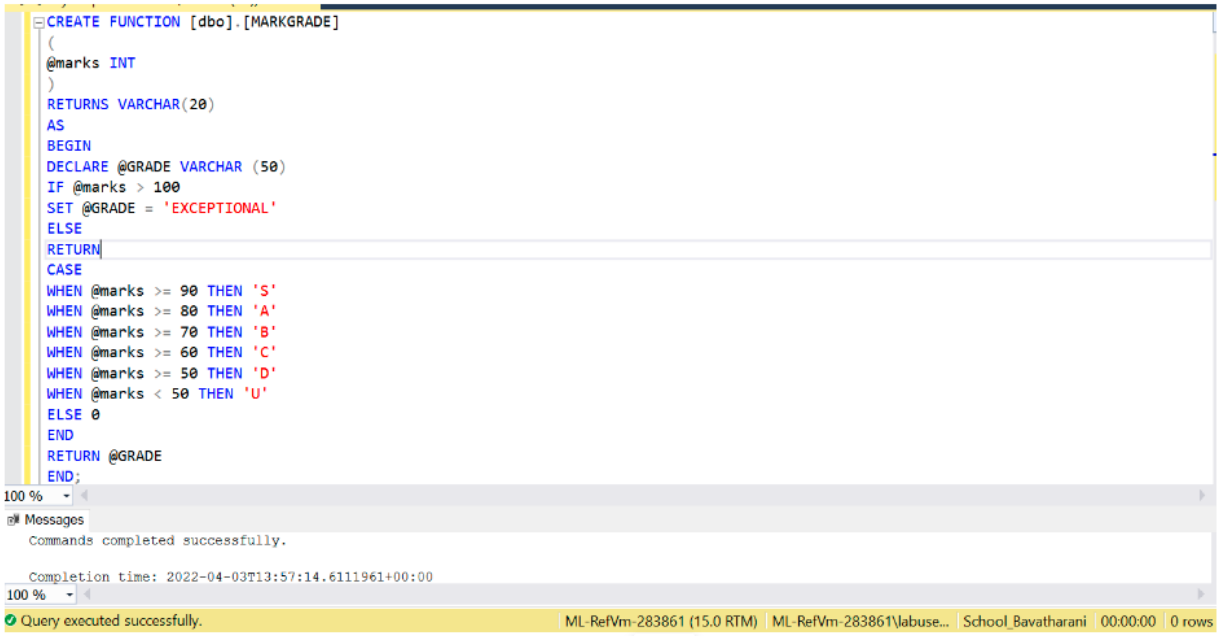
3.

CREATE procedure insertStudents
(@regno int, @FNAME nvarchar(30), @LNAME nvarchar(30), @DOB date, @DOJ date, @DEPT_ID int, @vila_name nvarchar(30), @st_name nvarchar(30),
@city nvarchar(20), @pincode int, @faculty_id nvarchar(50))
as
begin
IF NOT EXISTS (SELECT 1 FROM STUDENTS WHERE ST_ID = @regno) insert into STUDENTS
(ST_ID,
ST_FNAME,
ST_LNAME,
DOB,
JOIN_DATE,
ST_DEPT_ID,
HOUSE_NAME,
STREET_NAME,
CITY,
ZIPCODE,
STAFF_INCHARGE_ID)
values
(@regno,
@FNAME,
@LNAME,
@DOB,
@DOJ,
@DEPT_ID,
@vila_name,
@st_name,
@city,
@pincode,
@faculty_id)
end;
100 %
Results
Commands completed successfully.
Zoom

4.


CREATE FUNCTION studentHavingMaxMark()
RETURNS TABLE
AS
RETURN (SELECT SM.ST_ID,S.ST_FNAME,D.DEPT_NAME FROM STUDENT_MARKS SM
INNER JOIN STUDENTS S
ON S.ST_ID=SM.ST_ID
INNER JOIN DEPARTMENT D
ON S.ST_DEPT_ID=D.DEPT_ID
WHERE SM.[PERCENTAGE_MARKS]= (SELECT MAX([PERCENTAGE_MARKS]) FROM
STUDENTS MARKS))
100 %
Results
Commands completed successfully.

5.


CREATE FUNCTION [dbo].[MARKGRADE]
(
@marks INT
)
RETURNS VARCHAR(20)
AS
BEGIN
DECLARE @GRADE VARCHAR (50)
IF @marks > 100
SET @GRADE = 'EXCEPTIONAL'
ELSE
RETURN
CASE
WHEN @marks >= 90 THEN 'S'
WHEN @marks >= 80 THEN 'A'
WHEN @marks >= 70 THEN 'B'
WHEN @marks >= 60 THEN 'C'
WHEN @marks >= 50 THEN 'D'
WHEN @marks < 50 THEN 'U'
ELSE 0
END
RETURN @GRADE
END;
100 %
Messages
Commands completed successfully.
Completion time: 2022-04-03T13:57:14.6111961+00:00
100 %
Query executed successfully.
ML-RefVm-283861 (15.0 RTM)
ML-RefVm-283861\labuse...
School_Bavatharani
00:00:00
0 rows