

# LAB 5

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## Stored Procedures

Name1: Abdelrahman Aly Abdallah  
Abdelrahman EL-Khazendar

ID1: 38

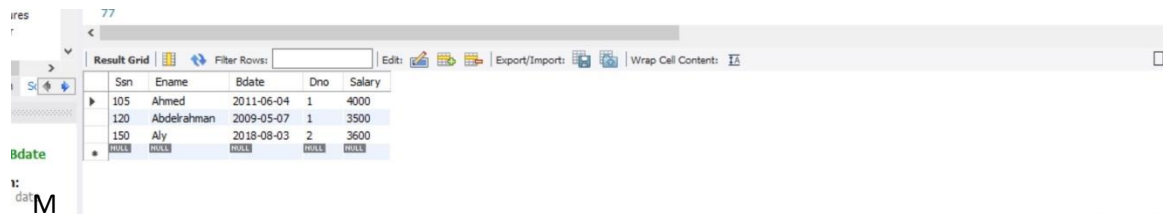
Name2:Ahmed Adel Mohamed Atef

ID2: 7

## Steps :

1. We created the schema COMPANY that has 2 tables DEPT and EMPLOYEE
2. After creating each table with its primary key , We altered tables by adding foreign keys
3. We inserted some values in tables then select them

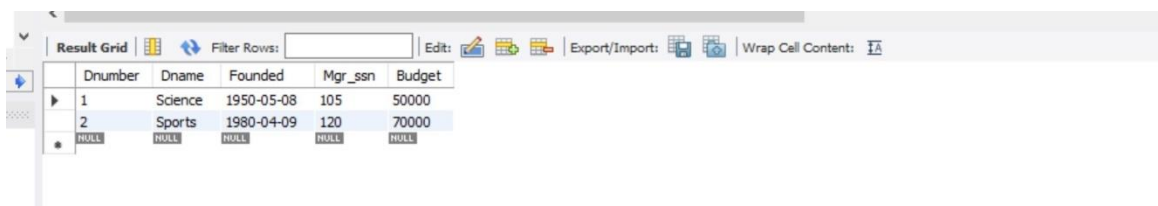
Here is the employee table



The screenshot shows a database management interface with a 'Result Grid' displaying the data of the EMPLOYEE table. The table has five columns: Ssn, Ename, Bdate, Dno, and Salary. The data is as follows:

Ssn	Ename	Bdate	Dno	Salary
105	Ahmed	2011-06-04	1	4000
120	Abdelrahman	2009-05-07	1	3500
150	Aly	2018-08-03	2	3600
NULL	NULL	NULL	NULL	NULL

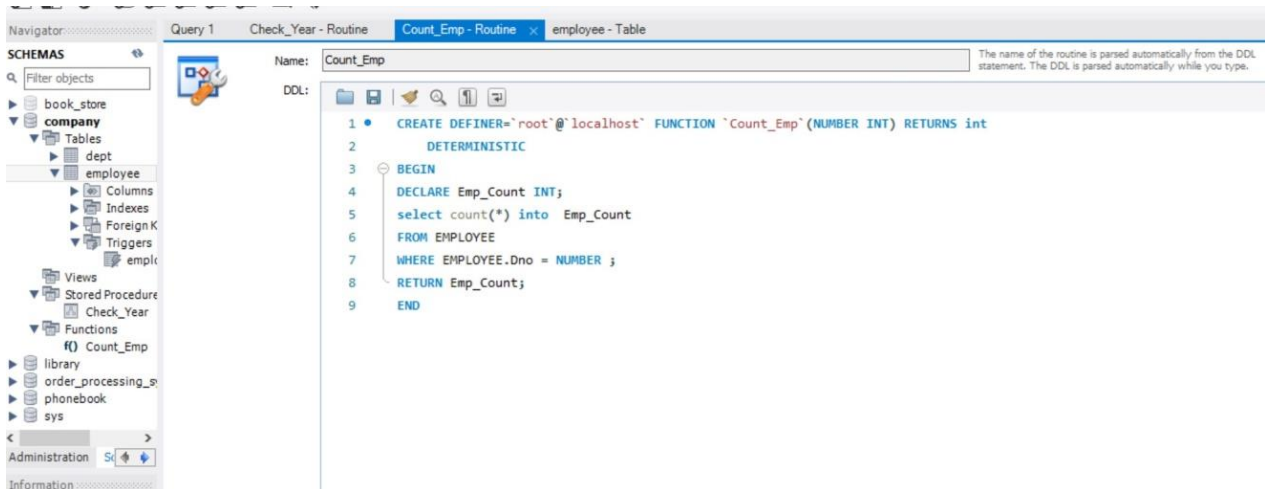
Here is the dept table



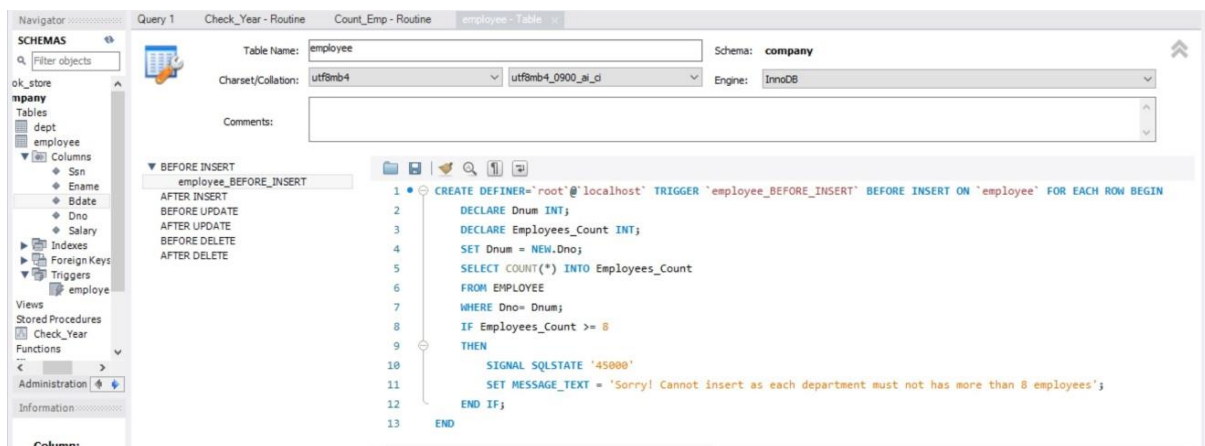
The screenshot shows a database management interface with a 'Result Grid' displaying the data of the DEPT table. The table has five columns: Dnumber, Dname, Founded, Mgr\_ssn, and Budget. The data is as follows:

Dnumber	Dname	Founded	Mgr_ssn	Budget
1	Science	1950-05-08	105	50000
2	Sports	1980-04-09	120	70000
NULL	NULL	NULL	NULL	NULL

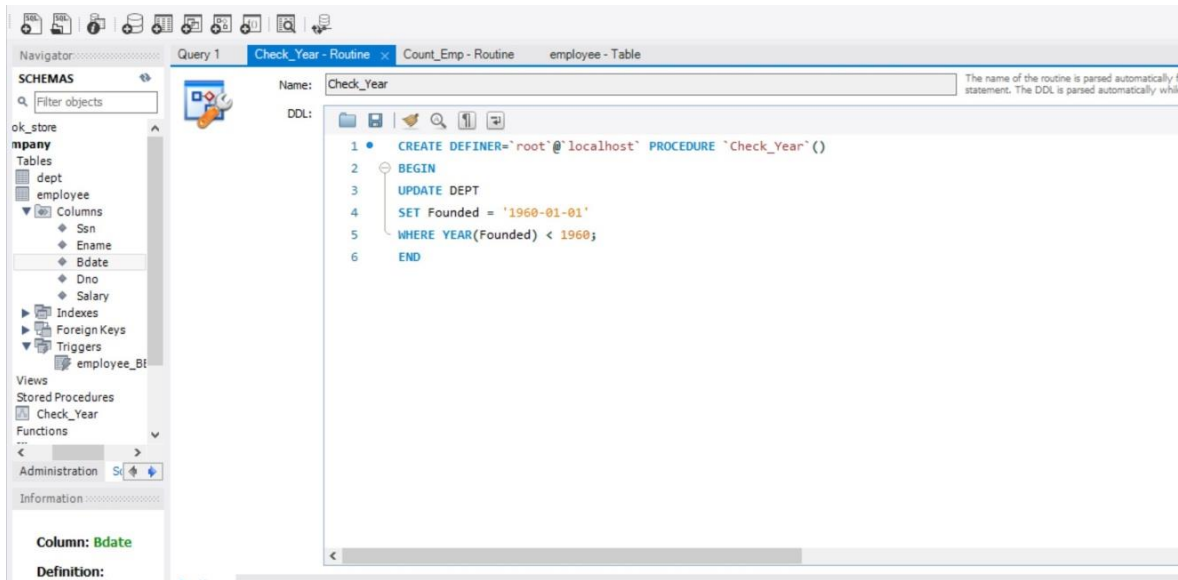
## 4. We created the function Count\_Emp



## 5. We created the trigger (in table employee)

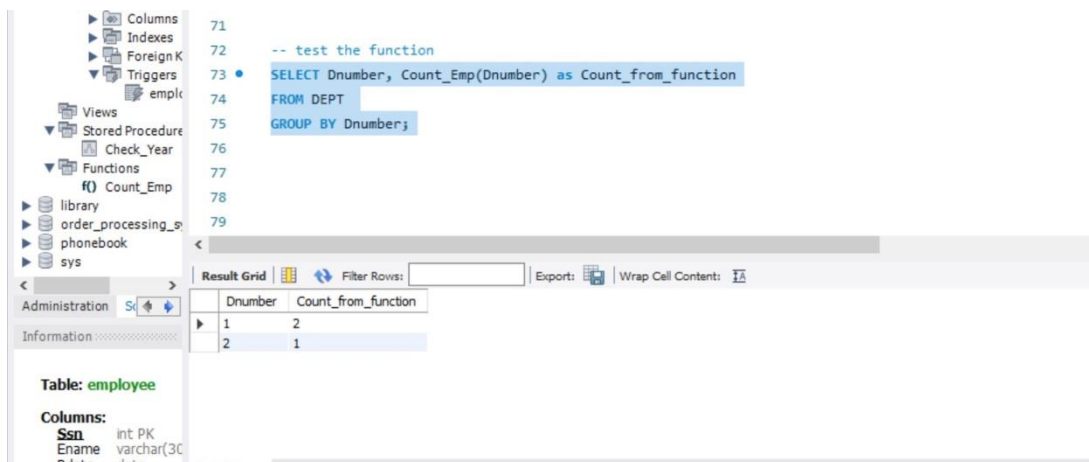


## 6. We created the procedure

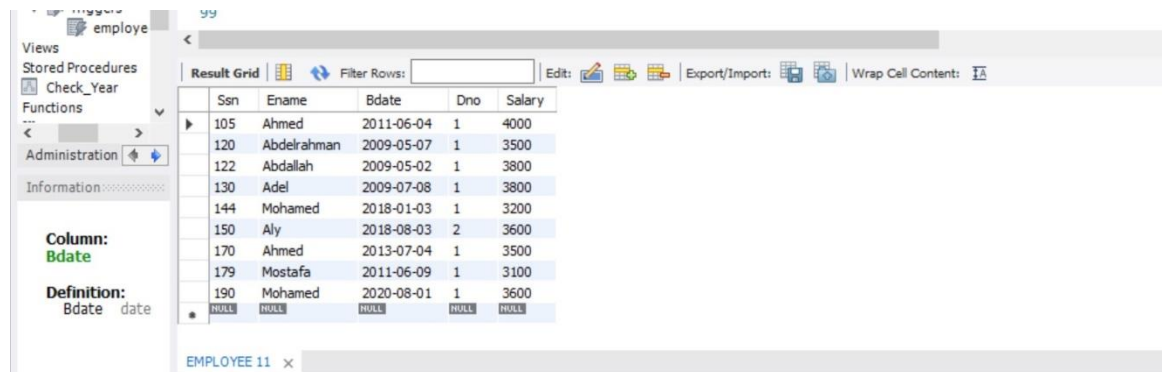


## Screenshots of the results:

- We tested the function (this result according to the values we inserted and their screenshot provided before

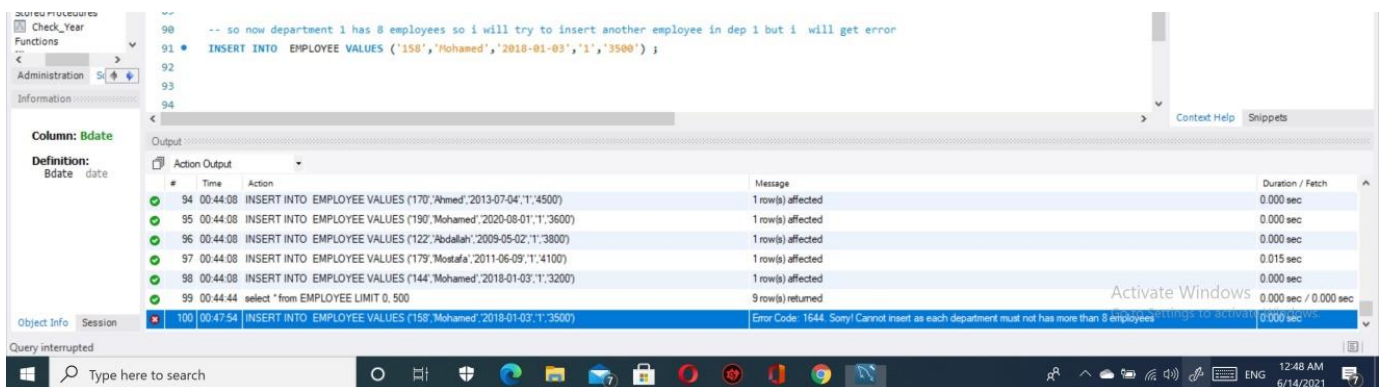


- We tested the trigger ( We added values to the values we added before to make number of employees in department 1 equal 8 then we tried to insert another employee but we had an error because of the trigger )



Ssn	Ename	Bdate	Dno	Salary
105	Ahmed	2011-06-04	1	4000
120	Abdelrahman	2009-05-07	1	3500
122	Abdallah	2009-05-02	1	3800
130	Adel	2009-07-08	1	3800
144	Mohamed	2018-01-03	1	3200
150	Aly	2018-08-03	2	3600
170	Ahmed	2013-07-04	1	3500
179	Mostafa	2011-06-09	1	3100
190	Mohamed	2020-08-01	1	3600
NULL	NULL	NULL	NULL	NULL

- We tested the procedure  
The values before:



#	Time	Action	Message	Duration / Fetch
94	00:44:08	INSERT INTO EMPLOYEE VALUES (170,'Ahmed','2013-07-04','1',4500)	1 row(s) affected	0.000 sec
95	00:44:08	INSERT INTO EMPLOYEE VALUES (190,'Mohamed','2020-08-01','1',3600)	1 row(s) affected	0.000 sec
96	00:44:08	INSERT INTO EMPLOYEE VALUES (122,'Abdallah','2009-05-02','1',3800)	1 row(s) affected	0.000 sec
97	00:44:08	INSERT INTO EMPLOYEE VALUES (179,'Mostafa','2011-06-09','1',4100)	1 row(s) affected	0.015 sec
98	00:44:08	INSERT INTO EMPLOYEE VALUES (144,'Mohamed','2018-01-03','1',3200)	1 row(s) affected	0.000 sec
99	00:44:44	select * from EMPLOYEE LIMIT 0, 500	9 row(s) returned	0.000 sec / 0.000 sec
100	00:47:54	INSERT INTO EMPLOYEE VALUES (158,'Mohamed','2018-01-03','1',3500)	Error Code: 1644, Sony! Cannot insert as each department must not has more than 8 employees	0.000 sec

Result Grid					
	Dnumber	Dname	Founded	Mgr_ssn	Budget
1	Science	1950-05-08	105	50000	
2	Sports	1980-04-09	120	70000	
*	NULL	NULL	NULL	NULL	NULL

Then (after testing the procedure): (the founded year of Dnumber 1 was 1950 < 1960 so its date became 1960-01-01 )

Columns

- Ssn
- Ename
- Bdate
- Dno
- Salary
- Indexes
- Foreign Keys
- Triggers
- employee\_Bi

Views

- Check\_Year

Stored Procedures

- Check\_Year

Functions

```

80 • CALL Check_Year();
81 • SELECT * FROM DEPT;
82
83
84
85
86
87
88

```

Dnumber	Dname	Founded	Mgr_ssn	Budget
1	Science	1960-01-01	105	50000
2	Sports	1980-04-09	120	70000
*	NULL	NULL	NULL	NULL

Column: Bdate

Definition: Bdate data

(Note: In the screenshots and all my work I created the function, procedure and trigger through navigator in independent file but last I put them in the original file so that I can give the link to only one file)

Columns

- Ssn
- Ename
- Bdate
- Dno
- Salary
- Indexes
- Foreign Keys
- Triggers
- emplo

Views

- Check\_Year

Stored Procedure

- Count\_Emp

Functions

- Count\_Emp

library

- order\_processing\_by
- phonebook
- sys

Administration

```

90
91 • -- I created the procedure
92
93 DROP procedure IF EXISTS 'Check_Year';
94
95 DELIMITER $$
96 • CREATE DEFINER='root'@'localhost' PROCEDURE 'Check_Year' ()
97 BEGIN
98 UPDATE DEPT
99 SET Founded = '1960-01-01'
100 WHERE YEAR(Founded) < 1960;
101 END$$
102
103 DELIMITER ;
104
105
106
107 • -- I created the trigger
108
109 DROP TRIGGER IF EXISTS 'company'.'employee_BEFORE_INSERT';
110
111

```

No object selected