

## Generated PROCs:

1. Proc encrypted **GetDataStudent** for different statement as 'Insert, Update, and Delete' and affected on table **Student** directly if it's existed before or not

```
/*
Execute GetDataStudent @id = NULL,
@name = 'Ali Hassan',
@email = 'ali@student.com',
@phone = '01099999999',
@IN_id = 3,
@address = 'Nasr City',
@MgrId = 2,

```

70 %

Results Messages

Result
1 Inserted

```
sp_helptext 'GetDataStudent'
GO
```

%

Messages

The text for object 'GetDataStudent' is encrypted.

Completion time: 2026-02-20T22:29:38.0583325+02:00

```
EXEC GetDataStudent
24,
NULL, NULL, NULL,
NULL, NULL, NULL, NULL, NULL,
'Delete';
GO
```

%

Results Messages

Result
Deleted

```
EXEC GetDataStudent
23,
NULL, NULL, NULL,
NULL, NULL, NULL, NULL,
'Delete';
GO
```

sp\_helptext 'GetDataStudent'

0 %

Results Messages

Msg 547, Level 16, State 0, Procedure GetDataStudent, Line 59 [Batch Start Line 117]  
The DELETE statement conflicted with the REFERENCE constraint "FK\_StuExam\_Student". The conflict occurred in database "ExaminationSystemDB", table "dbo.StuExam", column "StdId".  
The statement has been terminated.

(1 row affected)

Completion time: 2026-02-20T22:28:57.5815363+02:00

```
EXEC GetDataStudent
4,
NULL, NULL, NULL,
NULL, NULL, NULL, NULL, NULL,
'Delete';
GO

sp_helptext 'GetDataStudent'
GO
*/
```

%	
Results	Messages
Result	
Student Not Found	

70 %

Results

Messages

	StdId	UserId	Stdname	Stdemail	Stdphone	Stdadd	Birthday	InId	Mgrid
1	1	6	Sara Ibrahim	sara.s@student.com	01200000001	Cairo, Maadi	2000-05-15	3	2
2	2	7	ahmed	ahmed12@gmail.com	12548378	cairo	1996-11-17	2	2
3	3	8	Nour Hany	nour.h@student.com	01200000003	Giza, 6th October	2002-08-20	2	1
4	23	2	Ahmed Ibrahim	ahmed.s@student.com	01200000005	Cairo, Maadi	2000-05-15	3	2
5	24	1	Ali Hassan	ali@student.com	01099999999	Nasr City	2001-04-10	3	2

70 %

Results Messages									
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	StdId	Userld	Stdname	Stdemail	Stdphone	Stdadd	Birthday	Inld	Mgrid
1	1	6	Sara Ibrahim	sara.s@student.com	01200000001	Cairo, Maadi	2000-05-15	3	2
2	2	7	ahmed	ahmed12@gmail.com	12548378	cairo	1996-11-17	2	2
3	3	8	Nour Hany	nour.h@student.com	01200000003	Giza, 6th October	2002-08-20	2	1
4	23	2	Sara Ibrahim	sara.s@student.com	01200000001	Cairo, Maadi	2000-05-15	3	2
5	24	1	Ali Hassan	ali@student.com	01099999999	Nasr City	2001-04-10	3	2

70 %

Results Messages									
------------------	--	--	--	--	--	--	--	--	--

	StdId	Userld	Stdname	Stdemail	Stdphone	Stdadd	Birthday	Inld	Mgrid
1	1	6	Sara Ibrahim	sara.s@student.com	01200000001	Cairo, Maadi	2000-05-15	3	2
2	2	7	ahmed	ahmed12@gmail.com	12548378	cairo	1996-11-17	2	2
3	3	8	Nour Hany	nour.h@student.com	01200000003	Giza, 6th October	2002-08-20	2	1
4	23	2	Sara Ibrahim	sara.s@student.com	01200000001	Cairo, Maadi	2000-05-15	3	2

2. Proc encrypted **GetSelectStudent** for different statement as 'Select'
3. Proc encrypted **GetDataDepartment** for different statement as 'Insert, Update, and Delete'  
and affected on table **Department** directly if it's existed before or not

Go

70 %

1	2	3
4	5	6
7	8	9

```
(1 row affected)
```

Completion time: 2026-02-20T22:39:44.0836206+02:00

Go




```
(1 row affected)
```

```
(1 row affected)
```

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Results Messages

	DeptId	DeptName	Mgrid
1	1	Information Technology	1
2	2	Python	2
3	3	Java	1
4	4	SQL	2
5	9	Linux	2

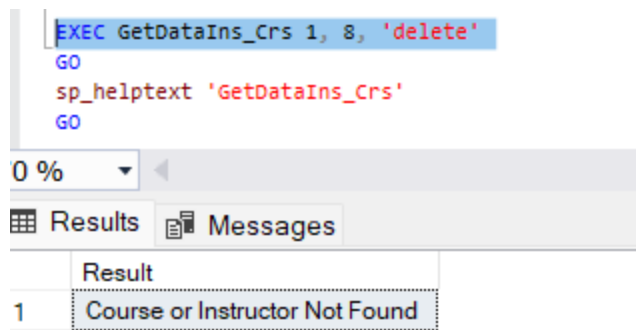
70 %

Results Messages

	DeptId	DeptName	Mgrid
1	1	Information Technology	1
2	2	Python	2
3	3	Java	1
4	4	SQL	2

4. Proc encrypted **GetSelectDepartment** for different statement as 'Select'
5. Proc encrypted **GetDataCourse** for different statement as 'Insert, Update, and Delete' and affected on table **Course** directly if it's existed before or not





10. Proc encrypted **GetSelectIns\_Crs** for different statement as 'Select'
11. Proc encrypted **GetDataStudent\_Exam** for different statement as 'Insert, Update, and Delete'  
and affected on table **Stuexam** directly if it's existed before or not



SQL Explorer

```

END
Exec GetDataStudent_Exam 23,14,150,'insert'
GO
sp_helptext 'GetDataStudent_Exam'
GO
-----
create proc GetSelectStudent_Exam
with Encryption
as
    select * from StuExam
Exec GetSelectStudent_Exam
GO

```

70 %

Results Messages

	Result
1	Inserted

```

END
Exec GetDataStudent_Exam 23,5,150,'delete'
GO
sp_helptext 'GetDataStudent_Exam'
GO
-----
create proc GetSelectStudent_Exam
with Encryption
as
    select * from StuExam
Exec GetSelectStudent_Exam
GO

```

70 %

Results Messages

	Result
1	Student or Exam Not Found

12. Proc encrypted **GetDataStudent\_Exam** for different statement as 'Select'
13. Proc encrypted **AddIntake** for Insertion the new intake by manager and affected on table **Intake** directly if it's existed before or not

```
END
AddIntake 2, Intake56, 2024, 3, 2, 2
GO
SP_helptext 'AddIntake'
```

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	(No column name)
1	Intake already exists

14. Proc encrypted **UpdateBranch** for Updation the branch by manager and affected on table **Branch** directly

```
UpdateBranch 3, 2, 'Cairo Branch', 'Maadi'
GO
```

70 %

	(No column name)
1	Branch added successfully

15. Proc encrypted **AssignStdToEx** to assign the student to the specified exam with the specified start & end time, and affected on table **Stuexam** directly if it's existed before or not

```

END
AssignStdToEx 2, 14, '10:05:00.0000000', '10:45:00.0000000'
GO
SP_helptext 'AssignStdToEx'
GO

```

70 %

Messages

(1 row affected)

Completion time: 2026-02-20T23:04:47.2797802+02:00

```

END
AssignStdToEx 24, 1, '10:05:00.0000000', '10:45:00.0000000'
GO
SP_helptext 'AssignStdToEx'
GO

```

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Results Messages

	Result
1	Error: Exam ID does not exist.

16. Proc encrypted **GenerateRandomExammm** to generate a random exam and affected on table **Exam** directly

70 %

Results Messages

	ExId	Extypes	InstId	CrslId	InId	Ex_date	StartTime	Endtime	Year	Totaltime	Totaldegree	options
1	2	Exam	1	1	2	2023-10-01	10:00:00.0000000	12:00:00.0000000	2023	120	100	Open Book
2	14	Exam	5	8	6	2025-11-01	10:00:00.0000000	12:00:00.0000000	2025	120	100	NULL
3	47	Exam	5	3	6	2025-11-01	10:00:00.0000000	12:00:00.0000000	2025	120	100	NULL

GenerateRandomExammm 3, 'Exam', 3, 5, 6, 2025, '2025-11-01', '10:00:00.0000000', '12:00:00.0000000', 120  
GO

70 %

Results Messages

	Result
1	Exam generated successfully

70 %

Results Messages

	StdId	ExId	Total_score	Obtained_degree	startTime	endtime
1	1	2	100.00	100.00	10:05:00.0000000	11:30:00.0000000
2	2	2	0.00	0.00	10:10:00.0000000	11:45:00.0000000
3	2	14	0.00	NULL	10:05:00.0000000	10:45:00.0000000
4	3	2	200.00	NULL	NULL	NULL
5	23	2	0.00	NULL	10:05:00.0000000	10:45:00.0000000
6	23	14	150.00	NULL	NULL	NULL

➤ Created backup on

Object Explorer

```

SELECT
    physical_device_name,
    backup_finish_date,
    backup_size/1024/1024 AS SizeMB
FROM msdb.dbo.backupset s
JOIN msdb.dbo.backupmediafamily f ON s.media_set_id = f.media_set_id
WHERE s.database_name = 'ExaminationSystemDB'
ORDER BY backup_finish_date DESC;

```

70 %

Results Messages

	physical_device_name	backup_finish_date	SizeMB
1	D:\ITI_Data Engineering\SQL\Mini Project.bak	2026-02-20 22:12:42.000	5.02343750000

```
BACKUP DATABASE ExaminationSystemDB
TO DISK = 'D:\ITI_Data Engineering\SQL\Mini Project.bak'
WITH FORMAT
```

0 %

**Messages**

Processed 560 pages for database 'ExaminationSystemDB', file 'ExamSys\_Primary' on file 1.  
Processed 72 pages for database 'ExaminationSystemDB', file 'ExamSys\_Data' on file 1.  
Processed 2 pages for database 'ExaminationSystemDB', file 'ExamSys\_Log' on file 1.  
BACKUP DATABASE successfully processed 634 pages in 0.068 seconds (72.782 MB/sec).

Completion time: 2026-02-20T22:12:42.8940503+02:00

This PC > New Volume (D:) > ITI\_Data Engineering > SQL >

Name	Date modified	Type	Size
Mini Project.bak	2/20/2026 10:12 PM	BAK File	5,176 KB