

LAB 5: USE of Trigger

CREATE DATABASE LAB5

USE LAB5

1. Create a table student (sid, sname, marks, address) and studentlog (logid, sid, actiontype, actiontime)

CREATE TABLE student(

sid int primary key,

sname varchar(30),

marks int,

saddress varchar(40)

)

*Select * from student*

	sid	sname	marks	saddress

CREATE TABLE studentlog(

logid int identity(1,1),

sid int ,

actiontype varchar(30),

actiontime date

foreign key(sid) references student(sid)

)

*select * from studentlog*

	logid	sid	actiontype	actiontime

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2. Create a trigger studentlog trigger in which log of student table inserted automatically when new data inserted to student table

```
CREATE TRIGGER studentlog_trigger  
ON student  
AFTER INSERT  
AS  
BEGIN
```

```
    INSERT INTO studentlog (sid, actiontype, actiontime)  
    SELECT sid, 'INSERT', GETDATE()  
    FROM inserted;
```

```
END;
```

```
Commands completed successfully.
```

```
Completion time: 2025-08-13T07:22:03.9016143+05:45
```

```
100 %
```

```
✓ No issues found
```

```
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```

```
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```

```
INSERT INTO student (sid, sname, marks, saddress)
```

```
VALUES (2, 'Abinash', 68, 'Kathmandu');
```

```
Select * from studentlog
```

	logid	sid	actiontype	actiontime
1	1	2	INSERT	2025-08-13

```
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```

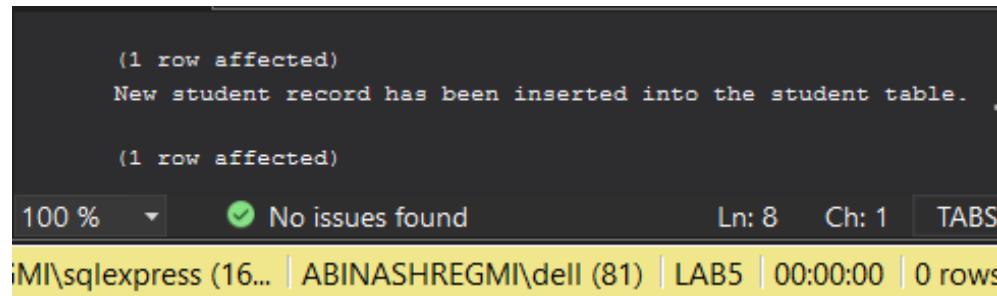
```
Select * from student
```

	sid	sname	marks	saddress
1	2	Abinash	68	Kathmandu

```
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```

3. Create a trigger ‘student_message’ after inserting dates to student table

```
CREATE TRIGGER student_message
ON student
AFTER INSERT
AS
BEGIN
    PRINT 'New student record has been inserted into the student table.';
END;
```



```
(1 row affected)
New student record has been inserted into the student table.

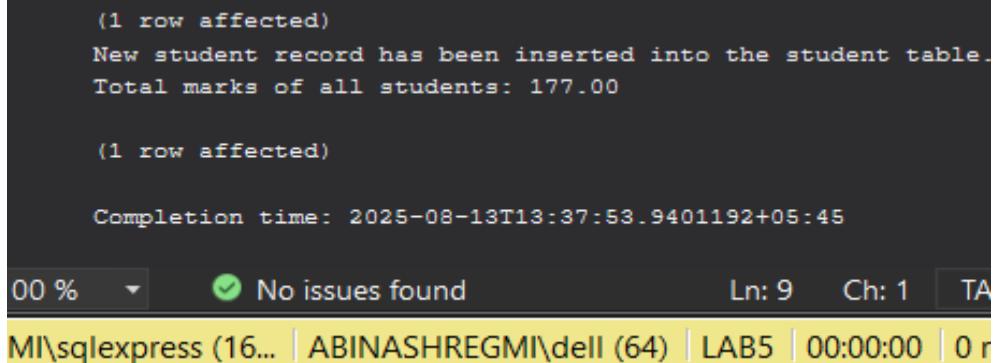
(1 row affected)

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```

4. Create a trigger ‘student_totalmarks’ to find total marks and display it

```
CREATE TRIGGER student_totalmarks
ON student
AFTER INSERT
AS
BEGIN
    DECLARE @total DECIMAL(10,2);
    SELECT @total = SUM(marks)
    FROM student;
    PRINT 'Total marks of all students: ' + CAST(@total AS VARCHAR(20));
END;
```

```
INSERT INTO student (sid, sname, marks, saddress)
VALUES (10, 'Ram', 85.50, 'Kathmandu');
```



```
(1 row affected)
New student record has been inserted into the student table.
Total marks of all students: 177.00

(1 row affected)

Completion time: 2025-08-13T13:37:53.9401192+05:45

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```