

*SchoolNova*



# IT102

SQL Insert, Update and Delete Statements

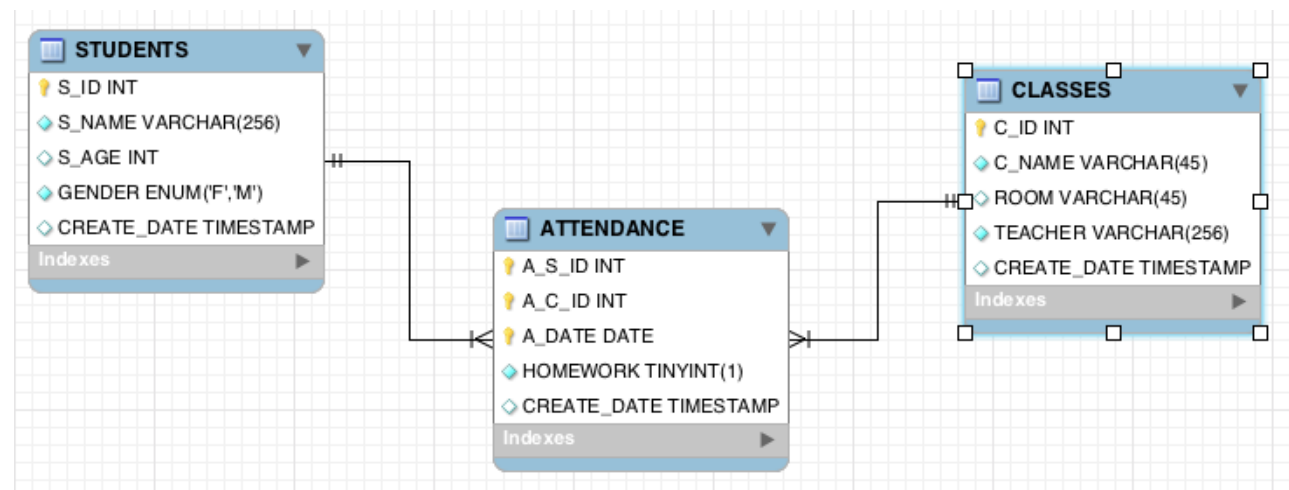
# INSERT

```
INSERT INTO table_name  
( field1, field2,...fieldN ) VALUES  
( value1, value2,...valueN );
```

- Explain this statement:

```
INSERT INTO CLASSES (C_NAME, ROOM,  
TEACHER) VALUES ('Art A', 'P127', ' Anya  
Cartwright'), ('Art B', 'P127', ' Anya Cartwright');
```

- Create a statement to insert **your** today's IT102 class attendance to the ATTENDANCE table.
- Each alphanumeric value, as well as date values ('year-month-date'), have to be enclosed in single quotes.



# UPDATE

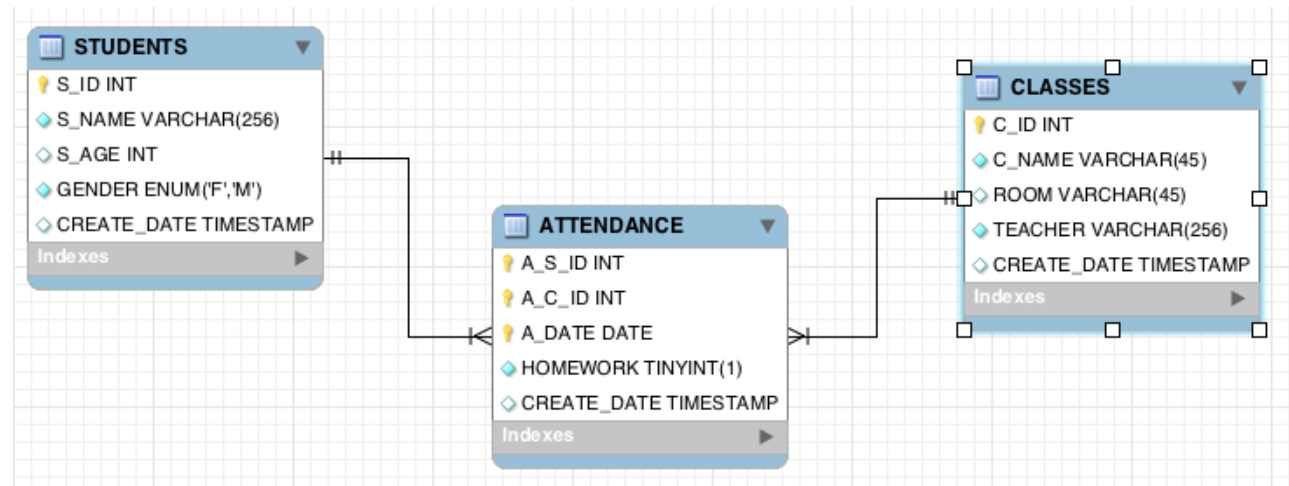
```
UPDATE table_name  
SET field1=new-value1,  
field2=new-value2  
[WHERE Clause];
```

- You can update one or more fields with one statement.
- You can specify any condition in the WHERE clause.
- You can update values in one table at a time.

- Explain this statement:

```
UPDATE ATTENDANCE SET HOMEWORK = 0  
WHERE A_S_ID = (SELECT S_ID FROM STUDENTS  
WHERE S_NAME = 'Maxim Baduk');
```

- Create a statement to change IT102 teacher's name to 'Marina Polonskaia'.
- Use a SELECT statement to validate your update.



# DELETE

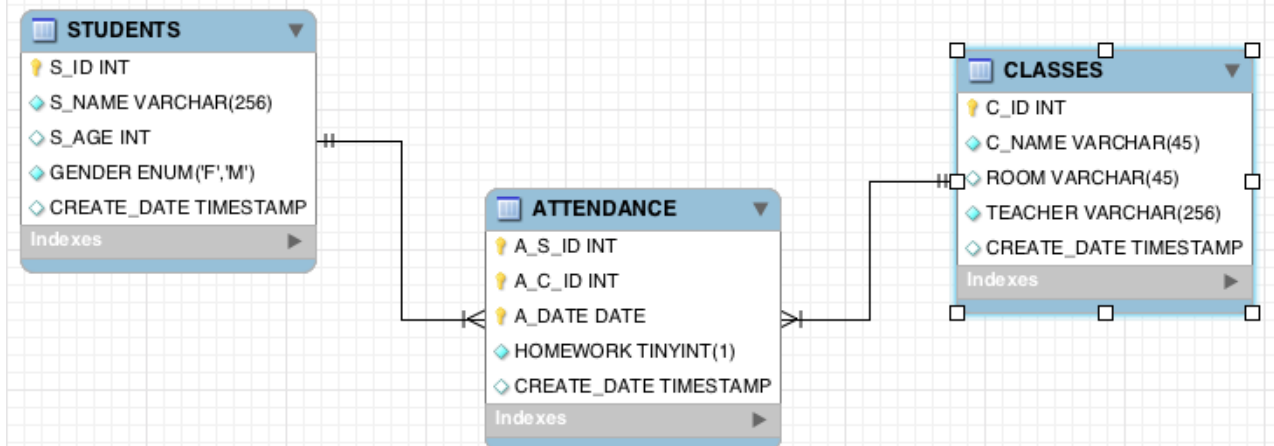
## DELETE FROM table\_name [WHERE Clause]

- If the WHERE clause is not specified, then all the records will be deleted from the given MySQL table.
- You can specify any condition using WHERE clause.
- You can delete records in a single table at a time.
- To delete the table, use the “DROP TABLE table\_name” statement.

- Explain this statement:

DELETE FROM CLASSES WHERE TEACHER = 'Alexander Kirillov';

- Who remembers what is Referential Integrity? What will happen if Kirillov's classes are referenced in the ATTENDANCE table (CASCADE | RESTRICT | SET NULL)? Check the ATTENDANCE table DDL.
- Create a statement to delete **your** attendance from the ATTENDANCE table.



# Homework

- If your MySQL Workbench is configured to use the safe mode, remove the following setting: Preferences → SQL Queries → Safe Updates
- Write the following SQL Statements:
  - ◆ Insert a record for a new student: 'Mister Z';
  - ◆ Insert ATTENDANCE record for Mister Z for today's Art A class, set HOMEWORK to 0;
  - ◆ Update the ATTENDANCE table, set Mister Z's HOMEWORK to 1;
  - ◆ Delete Mister Z and his ATTENDANCE records from the database.

[http://www.schoolnova.org/student\\_area/IT102/IT102\\_Lesson\\_7.sql](http://www.schoolnova.org/student_area/IT102/IT102_Lesson_7.sql)