

Assignment 5 - GROUP B

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Subject : DBMS

VIEW

Problem Statement:

Consider Student table containing information of student(sno,name,sub1,sub2,sub3) marks of minimum 10 students.

Create view on Student table and Try to update the base table(Student) using its corresponding view. Also consider restrictions on updatable views and perform view creation from multiple tables.

SOLUTION :

Step 1: Create database :-

```
mysql> create database view5;  
Query OK, 1 row affected (0.30 sec)
```

Step 2: Use/change database -

```
mysql> use view5;  
Database changed
```

Step 3: Create table with student details – sno, name, sub1, sub2, sub3 -

```
mysql> CREATE TABLE student  
-> (  
-> sno int(10),  
-> name varchar(30),  
-> sub1 int(3),  
-> sub2 int(3),  
-> sub3 int(3)  
-> );  
Query OK, 0 rows affected, 4 warnings (2.16 sec)  
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
sno	int	YES		NULL	
name	varchar(30)	YES		NULL	
sub1	int	YES		NULL	
sub2	int	YES		NULL	
sub3	int	YES		NULL	

5 rows in set (0.02 sec)

Step 4: Insert values into student table :-

```
mysql> INSERT INTO student  
values  
-> (1,ATHARVA,89,100,98),  
-> (2,SANTOSH,99,88,90),  
-> (3,JAY,97,88,83),  
-> (4,ROHIT,81,90,89),  
-> (5,POLLARD,99,96,87),
```



```
-> (6,'SHAMA',82,90,87),
-> (7,'CHAITANYA',93,78,87),
-> (8,'NILIMA',87,78,82),
-> (9,'VIRAJ',92,77,67),
-> (10,'SIDDHANT',89,83,81);
Query OK, 10 rows affected (0.23 sec) Records:
10 Duplicates: 0 Warnings: 0
```

Step 5: Create views: -

```
mysql> CREATE VIEW sub1_marks_1 AS
```

```
-> SELECT sno, sub1 FROM student
```

```
-> WHERE sno<9;
```

```
Query OK, 0 rows affected (0.25 sec)
```

```
mysql> select * from sub1_marks_1;
```

```
+-----+-----+
| sno | sub1 |
+-----+-----+
| 1 | 89 |
| 2 | 99 |
| 3 | 97 |
| 4 | 81 |
| 5 | 99 |
| 6 | 82 |
| 7 | 93 |
| 8 | 87 |
+-----+-----+
```

```
8 rows in set (0.00 sec)
```

```
mysql> CREATE VIEW names_from_d AS
```

```
-> SELECT sno, sub1, sub2, sub3 FROM student
```

```
-> WHERE name LIKE 'D%';
```

```
Query OK, 0 rows affected (0.43 sec)
```

```
mysql> select * from names_from_d;
```

```
+-----+-----+-----+-----+
| sno | sub1 | sub2 | sub3 |
+-----+-----+-----+-----+
| 4 | 81 | 90 | 89 |
| 5 | 99 | 96 | 87 |
| 10 | 89 | 83 | 81 |
+-----+-----+-----+-----+
```

```
3 rows in set (0.05 sec)
```

```
mysql> CREATE TABLE student_address
```

```
-> (
```

```
-> name varchar(30),
```

```
-> city varchar(30)
```

```
-> );
```

```
Query OK, 0 rows affected (1.25 sec)
```

```
mysql> SELECT * FROM STUDENT;
```

```
+-----+-----+-----+-----+
| sno | name | sub1 | sub2 | sub3 |
+-----+-----+-----+-----+
| 1 | ATHARVA | 89 | 100 | 98 |
| 2 | SANTOSH | 99 | 88 | 90 |
| 3 | JAY | 97 | 88 | 83 |
| 4 | ROHIT | 81 | 90 | 89 |
| 5 | POLLARD | 99 | 96 | 87 |
| 6 | SHAMA | 82 | 90 | 87 |
| 7 | CHAITANYA | 93 | 78 | 87 |
| 8 | NILIMA | 87 | 78 | 82 |
```



```

| 9 | VIRAJ | 92 | 77 | 67 |
| 10 | SIDDHANT | 89 | 83 | 81 |
+-----+
10 rows in set (0.05 sec)
mysql> INSERT INTO student_address VALUES
-> ('ATHARVA','BEED'),
-> ('SANTOSH','PARLI'),
-> ('JAY','AURANGABAD'),
-> ('ROHIT','MUMBAI'),
-> ('POLLARD','CHAGUARAMAS'),
-> ('SHAMA','KAIJ'),
-> ('CHAITANYA','BEED'),
-> ('NILIMA','LATUR'),
-> ('VIRAJ','BEED'),
-> ('SIDDHANT','AKOLA');
Query OK, 10 rows affected (0.18 sec)
Records: 10 Duplicates: 0 Warnings: 0

```

```

mysql> CREATE VIEW stud_details AS
-> SELECT student.sno, student.name, student_address.city
-> FROM student, student_address
-> WHERE student.name = student_address.name;
Query OK, 0 rows affected (0.37 sec)
mysql> select * from stud_details;

```

```

+-----+
| sno | name | city |
+-----+
| 1 | ATHARVA | BEED |
| 2 | SANTOSH | PARLI |
| 3 | JAY | AURANGABAD |
| 4 | ROHIT | MUMBAI |
| 5 | POLLARD | CHAGUARAMAS |
| 6 | SHAMA | KAIJ |
| 7 | CHAITANYA | BEED |
| 8 | NILIMA | LATUR |
| 9 | VIRAJ | BEED |
| 10 | SIDDHANT | AKOLA |
+-----+
10 rows in set (0.11 sec)

```

Step 6: Join two tables on the basis of name of student :-

```

mysql> SELECT student.sno, student.name, student.sub1, student.sub2, student.sub3,
student_address.city
-> FROM student
-> INNER JOIN student_address ON student.name=student_address.name;

```

```

+-----+
| sno | name | sub1 | sub2 | sub3 | city |
+-----+
| 1 | ATHARVA | 89 | 100 | 98 | BEED |
| 2 | SANTOSH | 92 | 88 | 90 | PARLI |
| 3 | JAY | 87 | 88 | 83 | AURANGABAD |
| 4 | ROHIT | 91 | 90 | 89 | MUMBAI |
| 5 | POLLARD | 89 | 96 | 87 | CHAGUARAMAS |
| 6 | SHAMA | 92 | 90 | 87 | KAIJ |
| 7 | CHAITANYA | 83 | 78 | 87 | BEED |
| 8 | NILIMA | 77 | 78 | 82 | LATUR |
| 9 | VIRAJ | 82 | 77 | 67 | BEED |

```

10	SIDDHANT	68	83	81	AKOLA
+-----+	+-----+	+-----+	+-----+	+-----+	+-----+

10 rows in set (0.00 sec)

