EAST WEST UNIVERSITY

Lab-5

CSE302

Database Systems

Sec :05

Submitted To:

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View:

A view is a specific look on data from one or more tables. It can arrange data in some specific order, highlight or hide some data.

We have the following “Student” table:

last_name	first_name	id	major	Marks	age
Rahman	Nadia	12	Biology	76	21
Islam	Sadia	15	English	66	26
Islam	Samia	18	Biology	78	12
Nilhaat	Fiana	203	English	81	31
Hossain	Zaima	210	English	88	18

View statement in MySQL :

```
1 CREATE VIEW minimumNumberView AS
2 SELECT id,major,Marks
3 FROM student
4 WHERE Marks<80
```

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 seconds.)

```
CREATE VIEW minimumNumberView AS SELECT id,major,Marks FROM student WHERE Marks<80;
```

Showing rows 0 - 2 (3 total, Query took 0.0008 seconds.)

```
SELECT * FROM minimumNumberView;
```

	id	major	Marks
Edit Copy Delete	12	Biology	76
Edit Copy Delete	15	English	66
Edit Copy Delete	18	Biology	78

Index:

An index is known as schema object. It is used by the server to speed up the retrieval of rows by using a pointer.

Index statement in MySQL:

```
1 CREATE INDEX age_index
2 ON student(age)
```

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0006 seconds.)

```
CREATE INDEX age_index ON student(age);
```

```
1 EXPLAIN SELECT major,age,id
2 FROM student
3 WHERE age=26
```

id	select_type	table	type	possible_keys	key	key_len	ref	rows	Extra
1	SIMPLE	student	ref	age_index	age_index	5	const	1	

String operation:

With string function, we can create expressions in access that manipulate text in a verity of ways.

String statement in MySQL:

```
SELECT * FROM student
WHERE first_name LIKE 'S%'
```

last_name	first_name	id	major	Marks	age
Islam	Sadia	15	English	66	26
Islam	Samia	18	Biology	78	12

```
SELECT * FROM `student`
WHERE first_name LIKE 'S___a'
```

last_name	first_name	id	major	Marks	age
Islam	Sadia	15	English	66	26
Islam	Samia	18	Biology	78	12

Conclusion:

By using a view instead of a query in an application, it is easier to make changes to the underlying table structure. Also by using a view to return data from tables instead of a SELECT, we can hide the WHERE clause or other columns to which we do not want the user to have access.

Indexes in SQL help us find a record or a list of records by matching the conditions of the WHERE clause. It can help queries to search for a specific value or inside a range of values and makes searching faster, which ultimately leads to the enhancement of the performance of the query.

By using string function, we can make the query process faster and efficient.