Chit\_no.\_15

create database student;

Query OK, 1 row affected (0.01 sec)

mysql> use student;

Database changed

mysql> CREATE TABLE students (

-> student\_id INT PRIMARY KEY AUTO\_INCREMENT,

-> student\_name VARCHAR(100),

-> age INT,

-> grade VARCHAR(2)

-> );

Query OK, 0 rows affected (0.02 sec)

mysql>

mysql> CREATE TABLE courses (

-> course\_id INT PRIMARY KEY AUTO\_INCREMENT,

-> course\_name VARCHAR(100),

-> credits INT

-> );

Query OK, 0 rows affected (0.01 sec)

mysql> INSERT INTO students (student\_name, age, grade) VALUES ('Alice Johnson', 20, 'A');

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO students (student\_name, age, grade) VALUES ('Bob Smith', 22, 'B');

Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO courses (course\_name, credits) VALUES ('Math 101', 3);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO courses (course\_name, credits) VALUES ('Physics 101', 4);

Query OK, 1 row affected (0.00 sec)

mysql> CREATE VIEW v\_students\_with\_grade\_a AS

-> SELECT student\_id, student\_name, age

-> FROM students

-> WHERE grade = 'A';

Query OK, 0 rows affected (0.01 sec)

mysql> SELECT \* FROM v\_students\_with\_grade\_a;

+------------+---------------+------+

| student\_id | student\_name | age |

+------------+---------------+------+

| 1 | Alice Johnson | 20 |

+------------+---------------+------+

1 row in set (0.01 sec)

mysql> CREATE INDEX idx\_student\_name ON students(student\_name);

Query OK, 0 rows affected (0.06 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM students WHERE student\_name = 'Alice Johnson';

+------------+---------------+------+-------+

| student\_id | student\_name | age | grade |

+------------+---------------+------+-------+

| 1 | Alice Johnson | 20 | A |

+------------+---------------+------+-------+

1 row in set (0.00 sec)

mysql> INSERT INTO students (student\_name, age, grade) VALUES ('Charlie Davis', 21, 'A');

Query OK, 1 row affected (0.00 sec)

mysql> SELECT \* FROM students AS stu;

+------------+---------------+------+-------+

| student\_id | student\_name | age | grade |

+------------+---------------+------+-------+

| 1 | Alice Johnson | 20 | A |

| 2 | Bob Smith | 22 | B |

| 3 | Charlie Davis | 21 | A |

+------------+---------------+------+-------+

3 rows in set (0.00 sec)

mysql> CREATE VIEW student\_synonym AS

-> SELECT \* FROM students;

Query OK, 0 rows affected (0.01 sec)

mysql> SELECT \* FROM student\_synonym;

+------------+---------------+------+-------+

| student\_id | student\_name | age | grade |

+------------+---------------+------+-------+

| 1 | Alice Johnson | 20 | A |

| 2 | Bob Smith | 22 | B |

| 3 | Charlie Davis | 21 | A |

+------------+---------------+------+-------+

3 rows in set (0.00 sec)