**ASSIGNMENT-SISDB TASK 2:**

mysql> use SISDB;

Database changed

mysql> select \* from students;

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

| student\_id | first\_name | last\_name | date\_of\_birth | email | phone\_number |

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

| 11 | Arun | Kumar | 2000-02-10 | arun.kumar@gmail.com | 9123456780 |

| 12 | Meera | Venkatesh | 1999-05-15 | meera.venkatesh@gmail.com | 9234567891 |

| 13 | Vikram | Reddy | 2001-07-21 | vikram.reddy@gmail.com | 9345678902 |

| 14 | Divya | Natarajan | 2002-09-30 | divya.natarajan@gmail.com | 9456789013 |

| 15 | Ravi | Chandran | 2000-12-05 | ravi.chandran@gmail.com | 9567890124 |

| 16 | Lakshmi | Subramanian | 2001-03-18 | lakshmi.subramanian@gmail.com | 9678901235 |

| 17 | Hari | Narayan | 1998-08-25 | hari.narayan@gmail.com | 9789012346 |

| 18 | Priya | Madhavan | 1999-06-12 | priya.madhavan@gmail.com | 9890123457 |

| 19 | Santhosh | Sivam | 2000-04-22 | santhosh.sivam@gmail.com | 9901234568 |

| 20 | Keerthi | Rajagopal | 2001-11-17 | keerthi.rajagopal@gmail.com | 9012345679 |

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

10 rows in set (0.04 sec)

mysql> select \* from teachers;

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

| teacher\_id | first\_name | last\_name | email |

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

| 1 | Sundar | Krishnan | sundar.krishnan@gmail.com |

| 2 | Lakshmi | Raghavan | lakshmi.raghavan@gmail.com |

| 3 | Ganesh | Prasad | ganesh.prasad@gmail.com |

| 4 | Uma | Shankar | uma.shankar@gmail.com |

| 5 | Rajesh | Varma | rajesh.varma@gmail.com |

| 6 | Anitha | Selvam | anitha.selvam@gmail.com |

| 7 | Mohan | Vasudevan | mohan.vasudevan@gmail.com |

| 8 | Deepa | Balakrishnan | deepa.balakrishnan@gmail.com |

| 9 | Karthik | Srinivasan | karthik.srinivasan@gmail.com |

| 10 | Revathi | Iyer | revathi.iyer@gmail.com |

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

10 rows in set (0.00 sec)

mysql> select \* from courses;

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

| course\_id | course\_name | credits | teacher\_id |

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

| 1001 | Python Basics | 4 | 1 |

| 1002 | Data Structures | 3 | 2 |

| 1003 | Database Systems | 4 | 3 |

| 1004 | Networking | 3 | 4 |

| 1005 | Operating Systems | 4 | 5 |

| 1006 | AI & ML | 3 | 6 |

| 1007 | Cyber Security | 4 | 7 |

| 1008 | Software Engineering | 3 | 8 |

| 1009 | Web Development | 4 | 9 |

| 1010 | Cloud Computing | 3 | 10 |

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

10 rows in set (0.00 sec)

mysql> select \* from enrollments;

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

| enrollment\_id | student\_id | course\_id | enrollment\_date |

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

| 101 | 11 | 1001 | 2024-03-01 |

| 102 | 12 | 1002 | 2024-03-02 |

| 103 | 13 | 1003 | 2024-03-03 |

| 104 | 14 | 1004 | 2024-03-04 |

| 105 | 15 | 1005 | 2024-03-05 |

| 106 | 16 | 1006 | 2024-03-06 |

| 107 | 17 | 1007 | 2024-03-07 |

| 108 | 18 | 1008 | 2024-03-08 |

| 109 | 19 | 1009 | 2024-03-09 |

| 110 | 20 | 1010 | 2024-03-10 |

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

10 rows in set (0.00 sec)

mysql> select \* from payments;

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

| payment\_id | student\_id | amount | payment\_date |

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

| 4001 | 11 | 1500.00 | 2024-03-11 |

| 4002 | 12 | 1200.00 | 2024-03-12 |

| 4003 | 13 | 1800.00 | 2024-03-13 |

| 4004 | 14 | 2100.00 | 2024-03-14 |

| 4005 | 15 | 1300.00 | 2024-03-15 |

| 4006 | 16 | 1700.00 | 2024-03-16 |

| 4007 | 17 | 1400.00 | 2024-03-17 |

| 4008 | 18 | 1600.00 | 2024-03-18 |

| 4009 | 19 | 1900.00 | 2024-03-19 |

| 4010 | 20 | 2000.00 | 2024-03-20 |

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

10 rows in set (0.00 sec)

**1. Write an SQL query to insert a new student into the "Students" table with the following details:**

**a. First Name: John**

**b. Last Name: Doe**

**c. Date of Birth: 1995-08-15**

**d. Email: john.doe@example.com**

**e. Phone Number: 1234567890**

mysql> INSERT INTO Students (first\_name, last\_name, date\_of\_birth, email, phone\_number)VALUES ('John', 'Doe', '1995-08-15', 'john.doe@example.com', '1234567890');

Query OK, 1 row affected (0.01 sec)

mysql> select \* from students;

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

| student\_id | first\_name | last\_name | date\_of\_birth | email | phone\_number |

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

| 11 | Arun | Kumar | 2000-02-10 | arun.kumar@gmail.com | 9123456780 |

| 12 | Meera | Venkatesh | 1999-05-15 | meera.venkatesh@gmail.com | 9234567891 |

| 13 | Vikram | Reddy | 2001-07-21 | vikram.reddy@gmail.com | 9345678902 |

| 14 | Divya | Natarajan | 2002-09-30 | divya.natarajan@gmail.com | 9456789013 |

| 15 | Ravi | Chandran | 2000-12-05 | ravi.chandran@gmail.com | 9567890124 |

| 16 | Lakshmi | Subramanian | 2001-03-18 | lakshmi.subramanian@gmail.com | 9678901235 |

| 17 | Hari | Narayan | 1998-08-25 | hari.narayan@gmail.com | 9789012346 |

| 18 | Priya | Madhavan | 1999-06-12 | priya.madhavan@gmail.com | 9890123457 |

| 19 | Santhosh | Sivam | 2000-04-22 | santhosh.sivam@gmail.com | 9901234568 |

| 20 | Keerthi | Rajagopal | 2001-11-17 | keerthi.rajagopal@gmail.com | 9012345679 |

| 21 | John | Doe | 1995-08-15 | john.doe@example.com | 1234567890 |

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

11 rows in set (0.00 sec)

**2. Write an SQL query to enroll a student in a course. Choose an existing student and course and insert a record into the "Enrollments" table with the enrollment date.**

mysql>

mysql> INSERT INTO Enrollments (student\_id, course\_id, enrollment\_date)VALUES (21, 1001, CURDATE());

Query OK, 1 row affected (0.04 sec)

mysql> select \* from enrollments;

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

| enrollment\_id | student\_id | course\_id | enrollment\_date |

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

| 101 | 11 | 1001 | 2024-03-01 |

| 102 | 12 | 1002 | 2024-03-02 |

| 103 | 13 | 1003 | 2024-03-03 |

| 104 | 14 | 1004 | 2024-03-04 |

| 105 | 15 | 1005 | 2024-03-05 |

| 106 | 16 | 1006 | 2024-03-06 |

| 107 | 17 | 1007 | 2024-03-07 |

| 108 | 18 | 1008 | 2024-03-08 |

| 109 | 19 | 1009 | 2024-03-09 |

| 110 | 20 | 1010 | 2024-03-10 |

| 111 | 21 | 1001 | 2025-03-26 |

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

11 rows in set (0.00 sec)

**3. Update the email address of a specific teacher in the "Teacher" table.Choose any teacher and modify their email address.**

mysql> UPDATE Teachers SET email = 'updatedganesh.prasad@gmail.com' WHERE teacher\_id = 3;

Query OK, 1 row affected (0.05 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from teachers;

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

| teacher\_id | first\_name | last\_name | email |

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

| 1 | Sundar | Krishnan | sundar.krishnan@gmail.com |

| 2 | Lakshmi | Raghavan | lakshmi.raghavan@gmail.com |

| 3 | Ganesh | Prasad | updatedganesh.prasad@gmail.com |

| 4 | Uma | Shankar | uma.shankar@gmail.com |

| 5 | Rajesh | Varma | rajesh.varma@gmail.com |

| 6 | Anitha | Selvam | anitha.selvam@gmail.com |

| 7 | Mohan | Vasudevan | mohan.vasudevan@gmail.com |

| 8 | Deepa | Balakrishnan | deepa.balakrishnan@gmail.com |

| 9 | Karthik | Srinivasan | karthik.srinivasan@gmail.com |

| 10 | Revathi | Iyer | revathi.iyer@gmail.com |

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

10 rows in set (0.00 sec)

**4. Write an SQL query to delete a specific enrollment record from the "Enrollments" table. Select an enrollment record based on the student and course.**

mysql> DELETE FROM Enrollments WHERE student\_id = 15 AND course\_id = 1005;

Query OK, 1 row affected (0.06 sec)

mysql> select \* from enrollments;

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

| enrollment\_id | student\_id | course\_id | enrollment\_date |

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

| 101 | 11 | 1001 | 2024-03-01 |

| 102 | 12 | 1002 | 2024-03-02 |

| 103 | 13 | 1003 | 2024-03-03 |

| 104 | 14 | 1004 | 2024-03-04 |

| 106 | 16 | 1006 | 2024-03-06 |

| 107 | 17 | 1007 | 2024-03-07 |

| 108 | 18 | 1008 | 2024-03-08 |

| 109 | 19 | 1009 | 2024-03-09 |

| 110 | 20 | 1010 | 2024-03-10 |

| 111 | 21 | 1001 | 2025-03-26 |

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

10 rows in set (0.00 sec)

**5. Update the "Courses" table to assign a specific teacher to a course. Choose any course and teacher from the respective tables.**

mysql> UPDATE Courses SET teacher\_id = 4 WHERE course\_id = 1002;

Query OK, 1 row affected (0.03 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from courses;

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

| course\_id | course\_name | credits | teacher\_id |

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

| 1001 | Python Basics | 4 | 1 |

| 1002 | Data Structures | 3 | 4 |

| 1003 | Database Systems | 4 | 3 |

| 1004 | Networking | 3 | 4 |

| 1005 | Operating Systems | 4 | 5 |

| 1006 | AI & ML | 3 | 6 |

| 1007 | Cyber Security | 4 | 7 |

| 1008 | Software Engineering | 3 | 8 |

| 1009 | Web Development | 4 | 9 |

| 1010 | Cloud Computing | 3 | 10 |

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

10 rows in set (0.00 sec)

**6. Delete a specific student from the "Students" table and remove all their enrollment records from the "Enrollments" table. Be sure to maintain referential integrity.**

mysql> DELETE FROM Students WHERE student\_id = 17;

Query OK, 1 row affected (0.03 sec)

mysql> select \* from students;

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

| student\_id | first\_name | last\_name | date\_of\_birth | email | phone\_number |

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

| 11 | Arun | Kumar | 2000-02-10 | arun.kumar@gmail.com | 9123456780 |

| 12 | Meera | Venkatesh | 1999-05-15 | meera.venkatesh@gmail.com | 9234567891 |

| 13 | Vikram | Reddy | 2001-07-21 | vikram.reddy@gmail.com | 9345678902 |

| 14 | Divya | Natarajan | 2002-09-30 | divya.natarajan@gmail.com | 9456789013 |

| 15 | Ravi | Chandran | 2000-12-05 | ravi.chandran@gmail.com | 9567890124 |

| 16 | Lakshmi | Subramanian | 2001-03-18 | lakshmi.subramanian@gmail.com | 9678901235 |

| 18 | Priya | Madhavan | 1999-06-12 | priya.madhavan@gmail.com | 9890123457 |

| 19 | Santhosh | Sivam | 2000-04-22 | santhosh.sivam@gmail.com | 9901234568 |

| 20 | Keerthi | Rajagopal | 2001-11-17 | keerthi.rajagopal@gmail.com | 9012345679 |

| 21 | John | Doe | 1995-08-15 | john.doe@example.com | 1234567890 |

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

10 rows in set (0.00 sec)

mysql> select \* from enrollments;

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

| enrollment\_id | student\_id | course\_id | enrollment\_date |

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

| 101 | 11 | 1001 | 2024-03-01 |

| 102 | 12 | 1002 | 2024-03-02 |

| 103 | 13 | 1003 | 2024-03-03 |

| 104 | 14 | 1004 | 2024-03-04 |

| 106 | 16 | 1006 | 2024-03-06 |

| 108 | 18 | 1008 | 2024-03-08 |

| 109 | 19 | 1009 | 2024-03-09 |

| 110 | 20 | 1010 | 2024-03-10 |

| 111 | 21 | 1001 | 2025-03-26 |

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

**7. Update the payment amount for a specific payment record in the "Payments" table. Choose any payment record and modify the payment amount.**

mysql> UPDATE Payments SET amount = 2000.00 WHERE payment\_id = 4003;

Query OK, 1 row affected (0.03 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from payments;

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

| payment\_id | student\_id | amount | payment\_date |

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

| 4001 | 11 | 1500.00 | 2024-03-11 |

| 4002 | 12 | 1200.00 | 2024-03-12 |

| 4003 | 13 | 2000.00 | 2024-03-13 |

| 4004 | 14 | 2100.00 | 2024-03-14 |

| 4005 | 15 | 1300.00 | 2024-03-15 |

| 4006 | 16 | 1700.00 | 2024-03-16 |

| 4008 | 18 | 1600.00 | 2024-03-18 |

| 4009 | 19 | 1900.00 | 2024-03-19 |

| 4010 | 20 | 2000.00 | 2024-03-20 |

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

9 rows in set (0.00 sec)