DAY -3

1)Create 3 tables named students,department,year

mysql> use gen\_ai

Database changed

mysql> CREATE TABLE department (

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

-> department\_name VARCHAR(255) NOT NULL

-> );

Query OK, 0 rows affected (0.06 sec)

mysql> CREATE TABLE year (

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

-> year\_name VARCHAR(255) NOT NULL

-> );

Query OK, 0 rows affected (0.02 sec)

mysql> CREATE TABLE students (

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

-> student\_name VARCHAR(255) NOT NULL,

-> department\_id INT,

-> year\_id INT,

-> FOREIGN KEY (department\_id) REFERENCES department(department\_id),

-> FOREIGN KEY (year\_id) REFERENCES year(year\_id)

-> );

Query OK, 0 rows affected (0.08 sec)

4)store 5 students for each department

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

| student\_name | department\_name |

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

| Diana | Civil Engineering |

| Diana | Civil Engineering |

| George | Civil Engineering |

| Hannah | Civil Engineering |

| Ivy | Civil Engineering |

| Jack | Civil Engineering |

| Alice | Computer Science |

| Alice | Computer Science |

| Eve | Computer Science |

| Mallory | Computer Science |

| Peggy | Computer Science |

| Trent | Computer Science |

| Charlie | Electrical Engineering |

| Charlie | Electrical Engineering |

| Dave | Electrical Engineering |

| Ellen | Electrical Engineering |

| Frank | Electrical Engineering |

| Zoe | Electrical Engineering |

| Bob | Mechanical Engineering |

| Bob | Mechanical Engineering |

| Victor | Mechanical Engineering |

| Walter | Mechanical Engineering |

| Xander | Mechanical Engineering |

| Yolanda | Mechanical Engineering |

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5)write a query to display students from CSE department

mysql> SELECT s.student\_name, d.department\_name

-> FROM students s

-> INNER JOIN department d ON s.department\_id = d.department\_id

-> WHERE d.department\_name = 'Computer Science';

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

| student\_name | department\_name |

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

| Alice | Computer Science |

| Alice | Computer Science |

| Eve | Computer Science |

| Mallory | Computer Science |

| Trent | Computer Science |

| Peggy | Computer Science |

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

6 rows in set (0.05 sec)

6)write a query to display only deptname using student table

mysql> SELECT DISTINCT d.department\_name

-> FROM students s

-> INNER JOIN department d ON s.department\_id = d.department\_id;

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

| department\_name |

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

| Computer Science |

| Mechanical Engineering |

| Electrical Engineering |

| Civil Engineering |

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

4 rows in set (0.02 sec)

7)write a query to display students sorted by dept and firstname

mysql> SELECT s.student\_name, d.department\_name

-> FROM students s

-> INNER JOIN department d ON s.department\_id = d.department\_id

-> ORDER BY d.department\_name, s.student\_name;

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

| student\_name | department\_name |

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

| Diana | Civil Engineering |

| Diana | Civil Engineering |

| George | Civil Engineering |

| Hannah | Civil Engineering |

| Ivy | Civil Engineering |

| Jack | Civil Engineering |

| Alice | Computer Science |

| Alice | Computer Science |

| Eve | Computer Science |

| Mallory | Computer Science |

| Peggy | Computer Science |

| Trent | Computer Science |

| Charlie | Electrical Engineering |

| Charlie | Electrical Engineering |

| Dave | Electrical Engineering |

| Ellen | Electrical Engineering |

| Frank | Electrical Engineering |

| Zoe | Electrical Engineering |

| Bob | Mechanical Engineering |

| Bob | Mechanical Engineering |

| Victor | Mechanical Engineering |

| Walter | Mechanical Engineering |

| Xander | Mechanical Engineering |

| Yolanda | Mechanical Engineering |

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24 rows in set (0.00 sec)