**LAB - 8**

**27|02|2023**

**Praneesh Sharma**

**CSE-24**

**21052264**

CREATE TABLE CUSTOMER(

CUSTOMER\_ID INT,

NAME VARCHAR(20),

PHNO INT,

CONSTRAINT CUST\_PK PRIMARY KEY(CUSTOMER\_ID)

);

CREATE TABLE PRODUCT(

PRODUCT\_ID INT,

PRICE INT,

CONSTRAINT PROD\_PK PRIMARY KEY(PRODUCT\_ID)

);

CREATE TABLE BUY(

BUY\_ID INT PRIMARY KEY,

CUSTOMER\_ID INT,

PRODUCT\_ID INT,

QUANTITY INT,

DATE DATE,

CONSTRAINT BUY\_FK1 FOREIGN KEY(CUSTOMER\_ID) REFERENCES CUSTOMER(CUSTOMER\_ID),

CONSTRAINT BUY\_FK2 FOREIGN KEY(PRODUCT\_ID) REFERENCES PRODUCT(PRODUCT\_ID)

);

INSERT INTO CUSTOMER VALUES

(1001, 'ABC', 123),

(1002, 'DEF', 456),

(1003, 'GHI', 789),

(1004, 'JKL', 147),

(1005, 'MNO', 584);

INSERT INTO PRODUCT VALUES

(101, 20),

(102, 25),

(103, 10),

(104, 15),

(105, 20);

INSERT INTO BUY VALUES

(1, 1001, 102, 2, '2023-02-01'),

(2, 1005, 103, 1, '2023-02-02'),

(3, 1004, 102, 1, '2023-02-03'),

(4, 1001, 101, 2, '2023-02-04'),

(6, 1003, 104, 5, '2023-02-06'),

(7, 1005, 105, 1, '2023-02-07'),

(8, 1004, 101, 2, '2023-02-08'),

(9, 1004, 102, 1, '2023-02-09'),

(10, 1003, 105, 1, '2023-02-10'),

(5, 1001, 102, 1, '2023-02-05');

SELECT NAME FROM ( CUSTOMER INNER JOIN BUY ON CUSTOMER.CUSTOMER\_ID=BUY.CUSTOMER\_ID) WHERE PRODUCT\_ID=102;

SELECT PRODUCT\_ID, SUM(QUANTITY) FROM BUY GROUP BY PRODUCT\_ID HAVING SUM(QUANTITY) >= ALL(SELECT SUM(QUANTITY) FROM BUY GROUP BY PRODUCT\_ID);

SELECT BUY.PRODUCT\_ID, PRICE\*BUY.QUANTITY AS REVENUE FROM (PRODUCT INNER JOIN BUY ON PRODUCT.PRODUCT\_ID=BUY.PRODUCT\_ID) WHERE PRICE IN (SELECT PRICE\*BUY.QUANTITY FROM PRODUCT);