Database Management Systems (DB212)

Tutorial 9

1. Consider the following table structure:

MEMBER

Column name	Data Type	Length
MEMID	NUMBER	5
NAME	CHARACTER	15
REGISTERDATE	DATE	
EXPIRYDATE	DATE	

VIDEO

Column name	Data Type	Length
VIDEO_CODE	CHARACTER	5
DESCRIPTION	CHARACTER	15
BALANCE_QTY	NUMBER	5

SALES

Column name	Data Type	Length
VIDEO_CODE	CHARACTER	5
MEMID	NUMBER	5
SALEDATE	DATE	
PRICE	NUMBER	8,2
QUANTITY	NUMBER	5

A. An index is created to provide rapid access to table-based data.

   (i) Write an SQL statement to create an index called MEMID_IDX on the MEMBER table for the MEMID column.
   CREATE INDEX MEMID_IDX ON MEMBER (MEMID);

   (ii) Provide the command to remove the index MEMID_IDX.
   DROP INDEX MEMID_IDX;

B. Write an SQL statement to add the following record to the MEMBER table.
    MEMID: 20002
    NAME: CALLY
    REGISTERDATE: 1st October 2003
    EXPIRYDATE: One year after the register date

INSERT INTO MEMBER
VALUES (20002, 'CALLY' , ' 01-OCT-03', '01-OCT-03' +365);

A correct alternative answer is:
INSERT INTO MEMBER (MEMID, NAME, REGISTERDATE, EXPIRYDATE)
VALUES (20002, 'CALLY' , ' 01-OCT-03', '01-OCT-03' +365);

C. Write an SQL statement to display the total number of sales for each video code.

SELECT VIDEO_CODE, COUNT(*)
FROM SALES
GROUP BY VIDEO_CODE;

D. Write an SQL statement to list the video codes and balance quantity for all videos that have a balance quantity less than 5. Sort the output so that those with the least balance quantity are listed first.

SELECT VIDEO_CODE, BALANCE_QTY
FROM VIDEO
WHERE BALANCE_QTY <5
ORDER BY BALANCE_QTY;