mmcoe@mmcoe-System-Product-Name:~$ sudo service oracle-xe start

[sudo] password for mmcoe:

mmcoe@mmcoe-System-Product-Name:~$ sqlplus

SQL\*Plus: Release 11.2.0.2.0 Production on Mon Sep 11 14:38:50 2023

Copyright (c) 1982, 2011, Oracle.  All rights reserved.

Enter user-name: mmcoe

Enter password:

Connected to:

Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production

SQL> create table library(bno number, name varchar2(20), author varchar2(20), allowed\_days number);

Table created.

SQL> insert into library values (101,'Hunger Games','Suzanne Collins',10);

1 row created.

SQL> insert into library values (102,'Divergent','Veronica Roth',10);

1 row created.

SQL> insert into library values (103,'Maze Runner','James Dashner',10);

1 row created.

SQL> insert into library values (104,'Wimpy Kid','Jeff Kinney',10);

1 row created.

SQL> select \* from library;

BNO NAME AUTHOR ALLOWED\_DAYS

-------- -------------------- ---------------------- -------------------------

101 Hunger Games Suzanne Collins        10

102 Divergent   Veronica Roth       10

103 Maze Runner   James Dashner       10

104 Wimpy Kid   Jeff Kinney       10

SQL> create table lib\_audit(bno number, old\_allowed\_days number, new\_allowed\_days number);

Table created.

**SQL> create or replace trigger t1 before update or delete on library**

**for each row**

**begin**

**insert into lib\_audit values (:old.bno, :old.allowed\_days, :new.allowed\_days);**

**end;**

Trigger created.

SQL> **update library set allowed\_days=08 where bno = 101;**

1 row updated.

SQL> select \* from library;

BNO NAME AUTHOR ALLOWED\_DAYS

-------- -------------------- ---------------------- -------------------------

101 Hunger Games Suzanne Collins        08

102 Divergent   Veronica Roth       10

103 Maze Runner   James Dashner       10

104 Wimpy Kid   Jeff Kinney       10

SQL> select \* from lib\_audit;

BNO OLD\_ALLOWED\_DAYS NEW\_ALLOWED\_DAYS

------- ---------------------------------- -----------------------------------

101 10   08

SQL> update library set allowed\_days = 15 where bno = 104;

1 row updated.

SQL> select \* from library;

   BNO NAME AUTHOR ALLOWED\_DAYS

-------- -------------------- ---------------------- -------------------------

101 Hunger Games Suzanne Collins        08

102 Divergent   Veronica Roth       10

103 Maze Runner   James Dashner       10

104 Wimpy Kid   Jeff Kinney       15

SQL> select \* from lib\_audit;

BNO OLD\_ALLOWED\_DAYS NEW\_ALLOWED\_DAYS

------- ---------------------------------- -----------------------------------

101 10   08

104 10 15

SQL> delete from library where bno = 101;

1 row deleted.

SQL> select \* from lib\_audit;

BNO OLD\_ALLOWED\_DAYS NEW\_ALLOWED\_DAYS

------- ---------------------------------- -----------------------------------

101 10   08

104 10 15

101 10  