```
SQL> -- Running mlib_initialSchemaInsert.sql
SQL> set echo off
SQL> ----- Task 1.1 Create Tables -----
SOL> @T1-ml-schm.sql
SQL> --***PLEASE ENTER YOUR DETAILS BELOW****
SQL> --T3-ml-alter.sql
SOL>
SOL> --Student ID: 30874157
SQL> --Student Name: Rui Qin
SOL> --Tutorial No: 02
SQL> /* Comments for your marker:
SQL>
SOL>
SQL>
SOL>
SQL>*/
SOL>
SQL> CREATE TABLE book_copy (
       branch_code
                          NUMBER(2) NOT NULL,
 3
       bc_id
                           NUMBER(6) NOT NULL,
        bc_purchase_price
                          NUMBER(7, 2) NOT NULL,
 5
        bc_counter_reserve CHAR(1) NOT NULL,
 6
        book_call_no
                          VARCHAR2(20) NOT NULL,
        CONSTRAINT book_copy_pk PRIMARY KEY ( bc_id,
                                          branch_code),
       CONSTRAINT bc_counter_reserve_chk CHECK ( bc_counter_reserve IN ( 'Y', 'N' ) }
 9
10 );
Table BOOK_COPY created.
SQL> COMMENT ON COLUMN book_copy.branch_code IS
       'Branch number ';
Comment created.
SOL>
SQL> COMMENT ON COLUMN book_copy.bc_id IS
        'book copy identifier';
Comment created.
SQL> COMMENT ON COLUMN book_copy.bc_purchase_price IS
 2
       'Purchase price for this copy';
Comment created.
SOL>
SQL> COMMENT ON COLUMN book_copy.bc_counter_reserve IS
        'Flag to indicate if on Counter Reserve or not (Y/N)';
Comment created.
SOL>
```

```
SQL> COMMENT ON COLUMN book_copy.book_call_no IS
         'Books call number - identifies a book';
Comment created.
SOL>
SQL> -- LOAN
SQL> CREATE TABLE loan (
        branch_code
                                  NUMBER(2) NOT NULL,
        bc_id
                                  NUMBER(6) NOT NULL,
         loan_date_time
                                  DATE NOT NULL,
         loan_due_date
                                  DATE NOT NULL,
  6
        loan_actual_return_date DATE,
                                  NUMBER(6) NOT NULL,
        CONSTRAINT loan_pk PRIMARY KEY ( loan_date_time, /
  9
                                              bc_id,
10
                                              branch code )
11 );
Table LOAN created.
SQL>
SQL> COMMENT ON COLUMN loan.branch_code IS
         'Branch number ';
 2
Comment created.
SQL>
SQL> COMMENT ON COLUMN loan.bc_id IS
         'Book copy id unique within the branch which owns this book copy';
Comment created.
SOL>
SQL> COMMENT ON COLUMN loan.loan_date_time IS
        'Date and time loan taken out';
Comment created.
SOL>
SQL> COMMENT ON COLUMN loan.loan_due_date IS
         'Date loan due ';
Comment created.
SQL> COMMENT ON COLUMN loan.loan_actual_return_date IS
        'Actual date loan returned';
Comment created.
SOL>
SQL> COMMENT ON COLUMN loan.bor_no IS
         'Borrower identifier';
Comment created.
```

```
SQL>
SQL>
SQL> -- RESERVE
SQL> CREATE TABLE reserve (
        reserve_id
                                   NUMBER(6) NOT NULL,
        branch_code
                                   NUMBER(2) NOT NULL,
        bc id
                                   NUMBER(6) NOT NULL,
 5
        reserve_date_time_placed DATE NOT NULL,
                                   NUMBER(6) NOT NULL,
        CONSTRAINT reserve_pk PRIMARY KEY ( reserve_id 📈
        CONSTRAINT reserve_uq UNIQUE ( branch_code,
                                        reserve_date_time_placed Y
10
11 );
Table RESERVE created.
SQL> COMMENT ON COLUMN reserve.reserve_id IS
        'Reservation number (unique across all branches)';
Comment created.
SQL>
SQL> COMMENT ON COLUMN reserve.branch_code IS
        'Branch number ';
Comment created.
SOL>
SQL> COMMENT ON COLUMN reserve.bc_id IS
        'Book copy id unique within the branch which owns this book copy';
Comment created.
SQL>
SQL> COMMENT ON COLUMN reserve_reserve_date_time_placed IS
        'Reservation number (unique across all branches)';
Comment created.
SQL>
SQL> COMMENT ON COLUMN reserve.bor_no IS
        'Borrower identifier';
Comment created.
SQL>
SQL> -- Add all missing FK Constraints below here
SOL>
SQL>
SOL> -- BOOK COPY
SQL> ALTER TABLE book_copy
        ADD CONSTRAINT book_detail_book_copy FOREIGN KEY ( book_call_no )
            REFERENCES book_detail ( book_call_no ) \square
```

```
Table BOOK_COPY altered.
SOL>
SQL> ALTER TABLE book_copy
     ADD CONSTRAINT branch_book_copy FOREIGN KEY ( branch_code )
           REFERENCES branch ( branch_code )/
Table BOOK_COPY altered.
SQL>
SOL>
SOL> -- LOAN
SQL> ALTER TABLE loan
       ADD CONSTRAINT book_copy_loan FOREIGN KEY ( bc_id,
                                                 branch code )
            REFERENCES book_copy ( bc_id,
                                 branch_code )%
 5
Table LOAN altered.
SOL>
SQL> ALTER TABLE loan
       ADD CONSTRAINT borrower_loan FOREIGN KEY ( bor_no )
           REFERENCES borrower ( bor_no ) 🗸
 3
Table LOAN altered.
SQL>
SOL>
SOL> -- RESERVE
SQL> ALTER TABLE reserve
    ADD CONSTRAINT borrower_reserve FOREIGN KEY ( bor_no )
           REFERENCES borrower ( bor_no /;
Table RESERVE altered.
SQL>
SQL> ALTER TABLE reserve
       ADD CONSTRAINT book_copy_reserve FOREIGN KEY ( bc_id,
 3
                                                    branch code )
 4
            REFERENCES book_copy ( bc_id,
                                 branch_code ) i/
Table RESERVE altered.
SOL>
SQL> COMMIT;
Commit complete.
SOL> ----- BOOK COPY -----
SQL> describe BOOK_COPY
Name Null? Type
BRANCH_CODE NOT NULL NUMBER(2)
```

```
NOT NULL NUMBER(6)
 BC PURCHASE_PRICE NOT NULL NUMBER(7,2)
 BC_COUNTER_RESERVE NOT NULL CHAR(1)
 BOOK_CALL_NO NOT NULL VARCHAR2(20)
 SOL> ----- LOAN ------
 SOL> describe LOAN
 Name Null? Type
BRANCH_CODE NOT NULL NUMBER(2)
BC_ID NOT NULL NUMBER(6)
LOAN_DATE_TIME NOT NULL DATE
LOAN_DUE_DATE NOT NULL DATE
 LOAN_ACTUAL_RETURN_DATE DATE
 BOR_NO NOT NULL NUMBER(6)
 SOL> ----- RESERVE -----
 SQL> describe RESERVE
 Name Null? Type
 RESERVE_ID NOT NULL NUMBER(6)
BRANCH_CODE NOT NULL NUMBER(2) 
BC_ID NOT NULL NUMBER(6)
 RESERVE DATE TIME PLACED NOT NULL DATE
 BOR_NO NOT NULL NUMBER(6)
 SQL>
 SOL> ----- CONSTRAINTS DECLARED ------
 SOL> set echo off
 CONSTRAINT_NAME CONSTRAINT_ TABLE_NAME SEARCH_CONDITION
 BOOK_COPY_PK Primary Key BOOK_COPY
BRANCH_BOOK_COPY Foreign Key BOOK_COPY
BRANCH_BOOK_COPY
BOOK_DETAIL_BOOK_COPY
SYS_C00340055
BC_COUNTER_RESERVE_CHK
SYS_C00340054
Check
SYS_C00340053
Check
SOOK_COPY
SYS_C00340052
Check
BOOK_COPY
SYS_C00340056
Check
BOOK_COPY
SYS_C00340056
Check
BOOK_COPY
SYS_C00340056
Check
BOOK_COPY
SYS_C00340056
Check
BOOK_COPY
Check
BOOK_COPY
SYS_CO0340056
Check
BOOK_COPY
Check
BOOK_COPY
SYS_CO0340056
Check
BOOK_COPY
COPY
Check
BOOK_COPY
Check
BOOK_COPY
COPY
CON
SYS_C00340060
Check
LOAN
SYS_C00340060
Check
LOAN
SYS_C00340069
Check
LOAN
CHeck
CHE
                                                                                                                  "BC COUNTER_RESERVE" IS NOT NULL
                                                                                                                   bc_counter_reserve IN ( 'Y', 'N' )
                                                                                                                 "BC PURCHASE PRICE" IS NOT NULL
                                                                                                                  "BC ID" IS NOT NULL
                                                                                                                  "BRANCH_CODE" IS NOT NULL
                                                                                                                  "BOOK_CALL_NO" IS NOT NULL
                                                                                                                  "LOAN_DUE_DATE" IS NOT NULL
                                                                                                                  "LOAN DATE TIME" IS NOT NULL
                                                                                                                  "BC ID" IS NOT NULL
                                                 Check
 SYS_C00340059
                                                                               LOAN
                                                                                                                   "BRANCH_CODE" IS NOT NULL
 SYS C00340063
                                                                                                                   "BOR NO" IS NOT NULL
                                                 Check
                                                                               LOAN
 RESERVE_UQ
                                                      Unique
                                                                                RESERVE
                                   Primary Key RESERVE
Foreign Key RESERVE
Foreign Key RESERVE
Check RESERVE
 RESERVE_PK
 BOOK_COPY_RESERVE
 BORROWER RESERVE
 SYS_C00340068
                                                                                                                   "RESERVE_DATE_TIME_PLACED" IS NOT NULL
                                                                     RESERVE
RESERVE
RESERVE
RESERVE
 SYS C00340067
                                                                                                                   "BC ID" IS NOT NULL
 SYS_C00340066
                                                                                                                   "BRANCH_CODE" IS NOT NULL
 SYS_C00340065
                                                                                                                  "RESERVE_ID" IS NOT NULL
 SYS C00340069
                                                                                                                 "BOR_NO" IS NOT NULL
```

```
26 rows selected.
SOL>
SQL> ----- Task 2 Load Student Data -----
SOL> @T2-ml-insert.sql
SQL> --***PLEASE ENTER YOUR DETAILS BELOW****
SQL> --T2-ml-insert.sql
SQL> --Student ID: 30874157
SQL> --Student Name: Rui Qin
SQL> --Tutorial No: 02
SQL> /* Comments for your marker:
SQL>
SÕL>
SQL>
SQL>
SQL>*/
SQL>
\widetilde{\text{SQL}}\text{>} -- 2 (a) Load the BOOK_COPY, LOAN and RESERVE tables with your own
SQL> -- test data following the data requirements expressed in the brief
SQL> -- BOOK_COPY
SQL> INSERT INTO book_copy VALUES (
 2
        10,
 3
        10,
        27.20,
        '005.74 D691D'
 7);
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
 2
        10,
 3
        17,
        45.20,
        '005.756 G476F'
  7
    );
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
        10,
 3
        18,
        23.40,
        '005.432 L761P'
  6
 7);
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
 2
        11.
 3
        11,
        12.90,
```

```
'Y',
         '005.756 G476F'
  7);
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
         16,
         45.20,
         'N',
'005.432 L761P'
    );
1 row inserted.
SQL>
SQL> INSERT INTO book_copy VALUES (
 2
         11,
  3
         19,
         23.08,
         'N',
         '823.914 A211H'
  7);
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
         12,
         12,
         58.20,
         'N',
         '112.6 S874D'
  6
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
 2
         12,
         15,
100.20,
  3
         'N',
         '823.914 H219A'
    );
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
         13,
         13,
         45.20,
         'N',
'005.432 L761P'
1 row inserted.
```

```
SQL> INSERT INTO book_copy VALUES (
         13,
         14,
  3
         23.08,
         '823.914 A211H'
1 row inserted.
SOL>
SQL> --update counter of book in branch
SQL> --Clayton
SQL> UPDATE branch
  2 SET
  3
         branch_count_books = (
             SELECT
                 branch_count_books
  6
             FROM
                 branch
  8
             WHERE
  9
                 branch_contact_no = '0395413120'
 10
         ) + 3
 11
    WHERE
 12
         branch_code = (
 13
             SELECT
 14
                 branch_code
 15
             FROM
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0395413120'
         );
 19
1 row updated.
SQL> --Glen Waverley
SQL> UPDATE branch
  2 SET
         branch_count_books = (
  3
             SELECT
  5
                 branch_count_books
             FROM
                 branch
             WHERE
  9
                 branch_contact_no = '0395601655'
 10
         ) + 3
 11
    WHERE
 12
         branch_code = (
 13
             SELECT
 14
                 branch_code
 15
             FROM
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0395601655'
 19
         );
```

```
1 row updated.
SQL> --Mount Waverley
SQL> UPDATE branch
 2 SET
  3
         branch_count_books = (
             SELECT
  5
                 branch_count_books
  6
             FROM
                 branch
  8
             WHERE
                 branch_contact_no = '0398075022'
  9
 10
         ) + 2
 11
    WHERE
 12
         branch_code = (
 13
             SELECT
 14
                 branch_code
 15
             FROM
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0398075022'
 19
         );
1 row updated.
SQL> --Mulgrave
SQL> UPDATE branch
    SET
         branch_count_books = (
             SELECT
                 branch_count_books
             FROM
                 branch
  8
             WHERE
  9
                 branch_contact_no = '0395461253'
 10
         ) + 2
 11
    WHERE
         branch_code = (
 12
 13
             SELECT
 14
                 branch_code
 15
             FROM
 16
                 branch
 17
             WHERE
18
                 branch_contact_no = '0395461253'
19
         );
1 row updated.
SQL>
SQL>
SQL> -- LOAN
SQL> INSERT INTO loan VALUES (
  2
         11.
  3
         TO_DATE('2021/08/03', 'yyyy/mm/dd'), X Missing time for loan date time
```

```
TO_DATE('2021/08/17', 'yyyy/mm/dd'),
           TO_DATE('2021/08/21', 'yyyy/mm/dd'),
  8
      );
1 row inserted.
SQL> INSERT INTO loan VALUES (
           11,
  3
           16,
           TO_DATE('2021/08/03', 'yyyy/mm/dd'),
TO_DATE('2021/08/17', 'yyyy/mm/dd'),
TO_DATE('2021/08/14', 'yyyy/mm/dd'),
           1
  8
      );
1 row inserted.
SQL> INSERT INTO loan VALUES (
  2
           10,
  3
           18,
           TO_DATE('2021/08/01', 'yyyy/mm/dd'),
           TO_DATE('2021/08/15', 'yyyy/mm/dd'),
TO_DATE('2021/08/04', 'yyyy/mm/dd'),
  8);
1 row inserted.
SQL> INSERT INTO loan VALUES (
           12,
  3
           12,
           TO_DATE('2021/08/01', 'yyyy/mm/dd'),
TO_DATE('2021/08/15', 'yyyy/mm/dd'),
TO_DATE('2021/08/04', 'yyyy/mm/dd'),
  5
  8);
1 row inserted.
SQL> INSERT INTO loan VALUES (
  2
           12,
  3
           15,
           TO_DATE('2021/08/01', 'yyyy/mm/dd'),
           TO_DATE('2021/08/15', 'yyyy/mm/dd'),
TO_DATE('2021/08/07', 'yyyy/mm/dd'),
  8);
1 row inserted.
SQL> INSERT INTO loan VALUES (
  2
           10,
  3
           10,
  4
           TO_DATE('2021/08/04', 'yyyy/mm/dd'),
           TO_DATE('2021/08/18', 'yyyy/mm/dd'),
```

```
TO_DATE('2021/08/12', 'yyyy/mm/dd'),
  8);
1 row inserted.
SQL> INSERT INTO loan VALUES (
          13,
          13,
          TO_DATE('2021/08/04', 'yyyy/mm/dd'),
TO_DATE('2021/08/18', 'yyyy/mm/dd'),
TO_DATE('2021/08/12', 'yyyy/mm/dd'),
  8
     );
1 row inserted.
SQL> INSERT INTO loan VALUES (
  2
          11,
  3
          11,
          TO_DATE('2021/08/04', 'yyyy/mm/dd'),
TO_DATE('2021/08/18', 'yyyy/mm/dd'),
          TO_DATE('2021/08/12', 'yyyy/mm/dd'),
  8
     );
1 row inserted.
SOL> -- RESERVE
SQL> INSERT INTO reserve VALUES (
          10,
  3
          12,
          TO_DATE('2021/08/29 16:00:00','yyyy/mm/dd hh24:mi:ss'),
  5
  6
  7
     );
1 row inserted.
SQL> INSERT INTO reserve VALUES (
  2
          11,
  3
          13,
          13,
          TO_DATE('2021/08/30 16:00:00','yyyy/mm/dd hh24:mi:ss'),
  7);
1 row inserted.
SOL> COMMIT;
Commit complete.
SQL> -- Check INSERT Count
```

#### SQL> set echo off

Table Loaded COUNT(\*)

1. BOOK\_COPY Rows: 2. LOAN Rows:

3. RESERVE Rows:

BRANCH_CODE	BC_ID	BC_PURCHASE_PRICE	В	BOOK_CALL_NO
			_	
10	10	27.2	Y	005.74 D691D
10	17	45.2	N	005.756 G476F
10	18	23.4	N	005.432 L761P
11	11	12.9	Y	005.756 G476F
11	16	45.2	N	005.432 L761P
11	19	23.08	N	823.914 A211H
12	12	58.2	N	112.6 S874D
12	15	100.2	N	823.914 H219A
13	13	45.2	Ν	005.432 L761P
13	14	23.08	N	823.914 A211H

10 rows selected.

BRANCH_CODE	BC_ID	LOAN_DATE_TIME	LOAN_DUE_DATE	LOAN_ACTUAL_RETURN_D	BOR_NO
11	19	03-AUG-2021 00:00:00	17-AUG-2021	21-AUG-2021	1
11	16	03-AUG-2021 00:00:00	17-AUG-2021	14-AUG-2021	1
10	18	01-AUG-2021 00:00:00	15-AUG-2021	04-AUG-2021	2
12	12	01-AUG-2021 00:00:00	15-AUG-2021	04-AUG-2021	2
12	15	01-AUG-2021 00:00:00	15-AUG-2021	07-AUG-2021	2
10	10	04-AUG-2021 00:00:00	18-AUG-2021	12-AUG-2021	3
13	13	04-AUG-2021 00:00:00	18-AUG-2021	12-AUG-2021	3
11	11	04-AUG-2021 00:00:00	18-AUG-2021	12-AUG-2021	3

6

8 rows selected.

RESERVE_ID	BRANCH_CODE	BC_ID	RESERVE_DATE_TIME_PLACED	BOR_NO
1.0	1.0	1.0	20 7177 2021 16.00.00	
10	12		29-AUG-2021 16:00:00	5
11	13	13	30-AUG-2021 16:00:00	1

SQL> -- EXPLICIT checks

SQL> --SQL> -- Check INSERT Data SQL> -----

SQL> set echo off SOL> -- BOOK COPY

SQL> set echo off

BOOK\_DETAILS COUNT

1. Book details used 2. Libraries assigned book copies

X Libraries NOT holding multiple copies of a book

4. Book copies on o	counter reserve		2	
SQL> CHECK brand SQL> set echo off	ch count of books	updated when	book copies	s inserted
BRANCH_CODE BOOKCON				
10 11 12 13	3 3 2 2	3 3 2 2	0 0 0 0	
SQL> LOAN SQL> Loan period SQL> Each book of SQL> For example SQL> 16th August SQL> set echo off no rows selected	copy can be loane e, a book borrowe	ed for 14 days ed on the 2nd A	and then mu August 2021	ust be renewed to avoid a fine. at 10:00 AM will be due on the
LOAN_DETAILS			COUN	1T
1. Loans dates inco 2. Loans completed 3. Loans returned 4. Loans still due 5. Branches involve 6. Borrowers involve	late ed in a loan	urned before ou		0 8 1 0 Minimum 1 NEEDED 4 3
6 rows selected.				
SQL> Reserves posque (should not SQL> set echo off	laced on a book w coccur) Count sh	which is on the nould be 0	e shelf ie.	not currently or never borrowed
ReservedBookIsOnShe	elf  0			
SQL> Reserve pla SQL> (should no SQL> set echo off			2	
CounterReserveUsedI				
	0			
SQL> Date range SQL> set echo off	used			
DATES_USED		COUNT		
1. Invalid Loan dat 2. Invalid reserve	es used	0		
SQL>	Task 1.2 Drop Ta	bles		

```
SQL> @T1-ml-drop.sql
SOL> --***PLEASE ENTER YOUR DETAILS BELOW****
SQL> --T1-ml-drop.sql
SQL>
SOL> --Student ID: 30874157
SOL> --Student Name: Rui Oin
SQL> --Tutorial No: 02
SQL> /* Comments for your marker:
SQL>
SOL>
SQL>
SQL>
SQL>*/
SQL>
SQL> -- 1.2 Add Drop table statements for ALL table below (not just those created
SQL> -- in this script)use ONLY
SQL> -- DROP TABLE tblname PURGE
SQL> -- syntax DO NOT use CASCADE CONSTRAINTS
SOL>
SQL> ALTER TABLE borrower
 2 DROP CONSTRAINT branch_borr;
Table BORROWER altered.
SOL>
SQL> ALTER TABLE branch
 2 DROP CONSTRAINT branch_contact_no_uq;
Table BRANCH altered.
SOL>
SQL> ALTER TABLE book_copy
 2 DROP CONSTRAINT book_detail_book_copy;
Table BOOK_COPY altered.
SQL> ALTER TABLE book_copy
 2 DROP CONSTRAINT branch_book_copy;
Table BOOK_COPY altered.
SQL> ALTER TABLE loan
 2 DROP CONSTRAINT book_copy_loan;
Table LOAN altered.
SOL>
SQL> ALTER TABLE loan
      DROP CONSTRAINT borrower_loan;
Table LOAN altered.
SOL>
```

```
SQL> ALTER TABLE reserve
      DROP CONSTRAINT reserve_uq;
Table RESERVE altered.
SOL>
SQL> ALTER TABLE reserve
 2 DROP CONSTRAINT borrower_reserve;
Table RESERVE altered.
SOL>
SQL> ALTER TABLE reserve
 2 DROP CONSTRAINT book_copy_reserve;
Table RESERVE altered.
SOL>
SQL> ALTER TABLE loan
    DROP CONSTRAINT loan_branch;
Error starting at line: 47 File @ /Users/shiringhaffarianmaghool/Monash/Ass2A/FIT2094/T-02 Shirin/Marking/Qin Rui_14522358_assignsubmission_file_/T1-
ALTER TABLE loan
 DROP CONSTRAINT loan_branch
Error report -
ORA-02443: Cannot drop constraint - nonexistent constraint
02443. 00000 - "Cannot drop constraint - nonexistent constraint"
          alter table drop constraint <constraint_name>
*Action:
          make sure you supply correct constraint name.
SQL> DROP TABLE book_copy PURGE;
Table BOOK_COPY dropped.
SQL> DROP TABLE book_detail PURGE;
Table BOOK_DETAIL dropped.
SOL>
SQL> DROP TABLE loan PURGE;
Table LOAN dropped.
SQL> DROP TABLE reserve PURGE;
Table RESERVE dropped.
SOL> DROP TABLE borrower PURGE;
```

Table BORROWER dropped.

SOL>

```
SQL> -- Drop the manager_type is for the T3 new table
SQL> -- which relate with manager and branch
SOL>
SQL> ALTER TABLE manager_type
      DROP CONSTRAINT manager type branch;
Error starting at line: 63 File @ /Users/shiringhaffarianmaghool/Monash/Ass2A/FIT2094/T-02 Shirin/Marking/Qin Rui_14522358_assignsubmission_file_/T1-
In command -
ALTER TABLE manager_type
 DROP CONSTRAINT manager_type_branch
Error report -
ORA-00942: table or view does not exist
00942, 00000 - "table or view does not exist"
*Cause:
*Action:
SOL>
SQL> ALTER TABLE manager_type
      DROP CONSTRAINT manager_type_manager;
Error starting at line: 66 File @ /Users/shiringhaffarianmaghool/Monash/Ass2A/FIT2094/T-02 Shirin/Marking/Qin Rui_14522358_assignsubmission_file_/T1-
In command -
ALTER TABLE manager_type
 DROP CONSTRAINT manager_type_manager
Error report -
ORA-00942: table or view does not exist
00942. 00000 - "table or view does not exist"
*Cause:
*Action:
SOL>
SOL> DROP TABLE manager type PURGE;
Error starting at line: 69 File @ /Users/shiringhaffarianmaghool/Monash/Ass2A/FIT2094/T-02 Shirin/Marking/Qin Rui_14522358_assignsubmission_file_/T1-
In command -
DROP TABLE manager_type PURGE
Error report -
ORA-00942: table or view does not exist
00942. 00000 - "table or view does not exist"
*Cause:
*Action:
SOL>
SOL> DROP TABLE manager PURGE;
Error starting at line: 71 File @ /Users/shiringhaffarianmaghool/Monash/Ass2A/FIT2094/T-02 Shirin/Marking/Qin Rui_14522358_assignsubmission_file_/T1-
In command -
DROP TABLE manager PURGE
Error report -
ORA-02449: unique/primary keys in table referenced by foreign keys
02449. 00000 - "unique/primary keys in table referenced by foreign keys"
          An attempt was made to drop a table with unique or
*Cause:
           primary keys referenced by foreign keys in another table.
           Before performing the above operations the table, drop the
           foreign key constraints in other tables. You can see what
           constraints are referencing a table by issuing the following
           command:
           SELECT * FROM USER CONSTRAINTS WHERE TABLE NAME = "tabnam";
```

SOL>

```
SQL> DROP TABLE branch PURGE;
Table BRANCH dropped.
SQL>
SQL> COMMIT;
Commit complete. X Commit NOT used appropriately ( No Need for DDL)
SQL>
SOL> set echo off
TABLES_REMAINING
             SQL> ----- Student Data replaced with marking data ------
SQL> ----- Task 2 DML -----
SOL> @T2-ml-dm.sql
SQL> --***PLEASE ENTER YOUR DETAILS BELOW****
SQL> --T2-ml-dm.sql
SQL>
SQL> --Student ID: 30874157
SQL> --Student Name: Rui Qin
SQL> --Tutorial No: 02
SOL>
SQL> /* Comments for your marker:
SQL>
SQL>
SQL>
SQL>*/
SQL>
SQL > -- 2 (b) (i)
SQL>
SQL>
SQL> -- insert new book
SQL> INSERT INTO book_detail VALUES (
        '005.74 C824C',
        'Database Systems: Design, Implementation, and Management',
 3
        'R',
 5
        793,
        TO_DATE('2019','YYYY'),
        '13'
    );
1 row inserted.
SQL> -- insert new book's copy
SQL> INSERT INTO book_copy VALUES (
       X10,
20,
                           branch_code, bc_id should NOT be hardcoded
        120.00,
        'N',
        '005.74 C824C'
    );
```

```
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
        X11,
X20,
  2
  3
         120.00,
  4
  5
         'N',
         '005.74 C824C'
     );
1 row inserted.
SQL> INSERT INTO book_copy VALUES (
       X13,
        X20,
         120.00,
  5
         '005.74 C824C'
  6
1 row inserted.
SQL>
SQL>
SQL> --update counter of book in branch
SQL>
SQL>
SQL> --Clayton
SQL> UPDATE branch
     SET
         branch_count_books = (
             SELECT
                 branch_count_books
  5
  6
                 branch
  8
  9
                 branch_contact_no = '0395413120'
 10
         ) + 1
 11
     WHERE
         branch_code = (
    SELECT
 12
 13
 14
                 branch_code
 15
             FROM
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0395413120'
 19
         );
1 row updated.
SQL>
SQL>
SQL> --Glen Waverley
SQL> UPDATE branch
  2
     SET
         branch_count_books = (
```

```
SELECT
                 branch_count_books
             FROM
                 branch
  8
             WHERE
  9
                 branch_contact_no = '0395601655'
 10
         ) + 1
 11
    WHERE
 12
         branch_code = (
 13
             SELECT
 14
                 branch code
 15
             FROM
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0395601655'
 19
         );
1 row updated.
SQL>
SQL>
SQL> --Mulgrave
SQL> UPDATE branch
  2 SET
  3
         branch_count_books = (
             SELECT
  5
                 branch_count_books
             FROM
                 branch
             WHERE
  9
                 branch_contact_no = '0395461253'
 10
         ) + 1
 11
    WHERE
 12
         branch_code = (
 13
             SELECT
 14
                 branch_code
 15
 16
                 branch
 17
             WHERE
 18
                 branch_contact_no = '0395461253'
 19
         );
1 row updated.
SQL>
          X Missing commit
SOL>
SQL> -- 2 (b) (ii)
SQL> CREATE SEQUENCE bor no seq START WITH 100 INCREMENT BY 1 NOCACHE V
Sequence BOR_NO_SEQ created.
SQL> CREATE SEQUENCE reserve_id_seq START WITH 100 INCREMENT BY 1 NOCACHE;/
Sequence RESERVE_ID_SEQ created.
                                    drop should come before create
SQL> --DROP SEQUENCE bor_no_seq;
```

```
SQL> --DROP SEQUENCE reserve_id_seq;
SQL> -- These are drop of sequences, but I need to use sequences under so I drop before commit.
SQL>
SQL>
SQL> -- 2 (b) (iii)
SQL> INSERT INTO borrower VALUES (
         bor_no_seq.NEXTVAL
         'Ada',
         'Lovelace',
         '1 Swanston street',
         'Melbourne',
  6
         '3000',
  8
  9
             SELECT
 10
                 branch_code
 11
             FROM
 12
                 branch
 13
             WHERE
 14
                 branch_contact_no = '0395413120'
 15
 16);
1 row inserted. \times Missing commit
SQL> INSERT INTO reserve VALUES (
  2
         reserve_id_seq.NEXTVAL
  3
  4
             SELECT
  5
                 branch_code
  6
             FROM
                 branch
  8
             WHERE
  9
                 branch_contact_no = '0395413120'
 10
 11
 12
             SELECT
 13
                 bc_id
 14
             FROM
 15
                 book_copy
 16
 17
                 book_call_no = '005.74 C824C'
 18
                 AND branch_code = (
 19
                     SELECT
 20
                          branch_code
 21
                     FROM
 22
                          branch
 23
                     WHERE
 24
                          branch_contact_no = '0395413120'
 25
 26
 27
         TO_DATE('2021/09/14 15:30:00','yyyy/mm/dd hh24:mi:ss'),
         bor_no_seq.CURRVALX should not use sequence
 28
 29
     );
1 row inserted.
```

Missing commit

```
SQL>
SQL>
SQL > -- 2 (b) (iv)
SQL> INSERT INTO loan VALUES (
  3
             SELECT
                 branch_code
             FROM
                 branch
             WHERE
  8
                 branch_contact_no = '0395413120'
  9
 10
 11
             SELECT
 12
                 bc_id
 13
             FROM
 14
                 book_copy
 15
             WHERE
 16
                 branch_code = (
                                          X Extra subquery
 17
                     SELECT
 18
                          branch_code
 19
                     FROM
 20
                          branch
 21
                     WHERE
 22
                          branch_contact_no = '0395413120
23
 24
                  AND bc id = (
 25
                      SELECT
 26
                          bc_id
 27
                     FROM
 28
                          book_copy
 29
                     WHERE
 30
                          branch_code = (
 31
                              SELECT
 32
                                  branch_code
 33
                              FROM
                                  branch
 35
                              WHERE
 36
                                  branch_contact_no = '0395413120'
 37
 38
                          AND book_call_no = '005.74 C824C'
 39
 40
 41
             SELECT
                 reserve_date_time_placed + 7 - ( 2 / 24 )
Incorect calculation of date
 42
 43
 44
             FROM
 45
                 reserve
 46
             WHERE
 47
                 branch_code = (
 48
                     SELECT
 49
                          branch_code
 50
                     FROM
 51
                          branch
 52
                     WHERE
 53
                          branch_contact_no = '0395413120'
```

```
54
 55
                 AND bc_id = (
 56
                     SELECT
 57
                          bc_id
 58
                     FROM
 59
                          book_copy
 60
                     WHERE
 61
                          branch_code = (
 62
                              SELECT
 63
                                  branch_code
 64
                              FROM
 65
                                  branch
 66
                              WHERE
 67
                                  branch_contact_no = '0395413120'
 68
                          AND book_call_no = '005.74 C824C'
 69
 70
 71
                 AND bor_no = (
 72
                     SELECT
 73
                          bor_no
 74
                     FROM
 75
                          borrower
 76
 77
                          bor_fname = 'Ada'
 78
                          AND bor_lname = 'Lovelace'
 79
 80
 81
 82
             SELECT
                 reserve_date_time_placed + 7 - ( 2 / 24 ) + 14 \times
 83
 84
             FROM
 85
                 reserve
 86
             WHERE
 87
                 branch_code = (
 88
                     SELECT
 89
                          branch_code
 90
                     FROM
 91
                          branch
 92
                     WHERE
 93
                          branch_contact_no = '0395413120'
 94
 95
                 AND bc_id = (
 96
                     SELECT
 97
                          bc_id
 98
                     FROM
 99
                          book_copy
100
                     WHERE
                          branch_code = (
101
102
                              SELECT
103
                                  branch_code
104
                              FROM
105
                                  branch
106
                              WHERE
107
                                  branch_contact_no = '0395413120'
108
109
                          AND book_call_no = '005.74 C824C'
```

```
110
111
                 AND bor_no = (
112
                     SELECT
113
                          bor_no
114
                     FROM
115
                          borrower
116
                     WHERE
                          bor_fname = 'Ada'
117
                          AND bor_lname = 'Lovelace'
118
119
120
       ),
VNULL,
121
122
123
             SELECT
124
                 bor_no
125
             FROM
126
                 borrower
127
             WHERE
128
                 bor_fname = 'Ada'
129
                 AND bor_lname = 'Lovelace'
130
131 );
1 row inserted.
SOL>
SQL> DELETE FROM reserve
    WHERE
         bor_no = (
             SELECT
                 bor_no
             FROM
                 borrower
  8
  9
                 bor_fname = 'Ada'
 10
                 AND bor_lname = 'Lovelace'
 11
 12
         AND branch_code = (
             SELECT
 13
 14
                 branch_code
 15
             FROM
                 branch
 16
 17
             WHERE
 18
                 branch_contact_no = '0395413120'
 19
 20
         AND bc_id = (
 21
             SELECT
 22
                 bc_id
 23
             FROM
 24
                 book_copy
25
 26
                 branch_code = (
 27
                     SELECT
 28
                          branch_code
 29
                     FROM
 30
                          branch
```

```
31
                         WHERE
 32
                              branch_contact_no = '0395413120'
 33
 34
                    AND book_call_no = '005.74 C824C'
 35
1 row deleted.
SQL> DROP SEQUENCE bor no seq;
Sequence BOR_NO_SEQ dropped.
SQL> DROP SEQUENCE reserve_id_seq;
Sequence RESERVE_ID_SEQ dropped.
SOL> COMMIT
Commit complete.
SQL> select table_name, table_type from cat where table_type='SEQUENCE' order by table_name;
no rows selected
SQL> select * from borrower;
                                      BOR_LNAME BOR_STREET
                                                                                         BOR_SUBURB
    BOR_NO BOR_FNAME
                                                                                                                  BOR_ BRANCH_CODE

        1 Mark
        Zuckerberg
        1 Facebook Way
        Faceville
        1000
        10

        2 Sergey
        Brin
        2 Alphabet Way
        Alphaville
        2000
        11

        3 Larry
        Page
        1 Alphabet Way
        Alphaville
        2000
        11

        4 Bill
        Gates
        1 Microsoft Way
        Microville
        3000
        12

        5 Tim
        Cook
        1 ApplePark Lane
        Appleville
        4000
        13

        00 Ada
        Lovelace
        1 Swanston street
        Melbourne
        3000
        10

        100 Ada
6 rows selected.
SOL> SELECT
  2
          branch_code,
  3
          to_char(loan_date_time,'dd-Mon-yyyy hh24:mi:ss') as loan_date_time,
  5
          to_char(loan_due_date,'dd-Mon-yyyy') as loan_due_date,
          to_char(loan_actual_return_date, 'dd-Mon-yyyy') as loan_actual_return_date,
          bor no
  8
     FROM
  9
          loan
 10 ORDER BY
 11
          loan_date_time;
BRANCH_CODE BC_ID LOAN_DATE_TIME
                                                            LOAN_DUE_DATE LOAN_ACTUAL_RETURN_D BOR_NO
          15-Jun-2021
```

20-Aug-2021

18-Aug-2021

1

3

100

```
12
                   4 12-Aug-2021 11:50:00
                                                  26-Aug-2021
        12
                   5 13-Aug-2021 10:00:00
                                                  27-Aug-2021
        12
                  1 15-Jun-2021 10:00:00
                                                  29-Jun-2021
                                                                     01-Aug-2021
                  1 15-Jun-2021 11:00:00
                                                  29-Jun-2021
        13
                                                                     05-Aug-2021
                   2 17-Jun-2021 10:00:00
        12
                                                  01-Jul-2021
                                                                      29-Jun-2021
        1.0
                  20 21-Sep-2021 13:30:00
                                                 05-Oct-2021
12 rows selected.
SOL>
SOL> SELECT
 2.
        reserve_id,
 3
        branch_code,
 5
        to_char(reserve_date_time_placed,'dd-Mon-yyyy hh24:mi:ss') as reserve_date_time_placed,
 6
        bor no
    FROM
 8
        reserve
 9 order by
10 reserve_date_time_placed;
RESERVE_ID BRANCH_CODE BC_ID RESERVE_DATE_TIME_PLACED BOR_NO
      1 12 4 16-Aug-2021 10:00:00
2 12 5 18-Aug-2021 11:30:00
                                                                    1
SQL>
SOL> set echo on
SOL> ----- Task 3 ALTER ------
SQL> @T3-ml-alter.sql
SQL> --***PLEASE ENTER YOUR DETAILS BELOW****
SQL> --T3-ml-alter.sql
SQL>
SOL> --Student ID: 30874157
SQL> --Student Name: Rui Qin
SQL> --Tutorial No: 02
SQL>
SQL> /* Comments for your marker:
SOL>
SOL>
SQL>
SOL>
SOL>*/
SQL>
SQL> ALTER TABLE book_copy ADD bc_state CHAR(1) DEFAULT 'G' NOT NULL :/
Table BOOK_COPY altered.
SQL> COMMENT ON COLUMN book_copy.bc_state IS
 2
        'Record whether a book is damaged (D) or lost (L) or good (G)';
Comment created.
SQL> ALTER TABLE book_copy
```

1 06-Aug-2021 13:06:00

13

```
ADD CONSTRAINT bc_state_chk CHECK ( bc_state IN (
             'L',
             'G'
  5
         ) ) i/
Table BOOK_COPY altered.
SQL> -- update the special book state
SQL> UPDATE book_copy
  2 SET
         bc_state = 'L \langle
 3
    WHERE
         branch_code = (
  6
             SELECT
                 branch_code
                                        × Extra
  8
             FROM
  9
                 branch
 10
             WHERE
 11
                 branch_contact_no = '0395601655'
 12
         ) AND
         bc_id = (
 13
 14
             SELECT
 15
                 bc_id
 16
             FROM
 17
                 book_copy
 18
             WHERE
 19
                 book_call_no = '005.74 C824C'
 20
                 AND branch_code = (
 21
                     SELECT
 22
                         branch_code
 23
                     FROM
 24
                         branch
 25
                     WHERE
 26
                         branch_contact_no = '0395601655'
 27
 28
         );
1 row updated.
            X Missing commit
SQL>
SOL>
SQL> ALTER TABLE loan ADD branch_bc_returned NUMERIC(2) >
Table LOAN altered.
SQL>
SQL> COMMENT ON COLUMN loan.branch_bc_returned IS
         'Branch code where book is returned';
Comment created.
SQL> ALTER TABLE loan
```

```
ADD CONSTRAINT loan branch FOREIGN KEY ( branch bc_returned )
             REFERENCES branch ( branch_code );/
Table LOAN altered.
SOL>
SQL> UPDATE loan
  2 SET
        branch_bc_returned = branch_code __/
    WHERE
  5
        loan actual return date IS NOT NULL;
9 rows updated.
    X Missing commit
SQL>
                                                     X did not populate data from branch table
SOL > -- 3 (c)
SQL> CREATE TABLE manager_type (
        branch_code NUMERIC(2) NOT NULL,
        man_id
mt type
                        NUMERIC(2) NOT NULL,
 3
                          CHAR(2) NOT NULL
  5);
Table MANAGER_TYPE created.
SOL>
SQL> COMMENT ON COLUMN manager_type.branch_code IS
        'Branch number ';
Comment created.
SOL>
SQL> COMMENT ON COLUMN manager_type.man_id IS
        'Manager id ';
Comment created.
SOL>
SQL> COMMENT ON COLUMN manager_type.mt_type IS
        'type of collection manager manages - F (Fiction), R(Reference), FR(Fiction Reference)';
Comment created.
SQL> --because the relationship change, not min one max one so drop man_id
SOL> ALTER TABLE branch DROP COLUMN man idv
Table BRANCH altered.
SOL> --define primary key
SQL> ALTER TABLE manager_type ADD CONSTRAINT manager_type_pk PRIMARY KEY ( branch_code,
                                                                           man id );/
Table MANAGER_TYPE altered.
SQL> ALTER TABLE manager_type
```

```
2
         ADD CONSTRAINT manager_type_branch FOREIGN KEY ( branch_code )
             REFERENCES branch ( branch_code ) \( \sqrt{} \)
Table MANAGER_TYPE altered.
SOL>
SQL> ALTER TABLE manager_type
         ADD CONSTRAINT manager_type_manager FOREIGN KEY ( man_id )
             REFERENCES manager ( man_id ) i/
Table MANAGER_TYPE altered.
SQL>
SQL> ALTER TABLE manager_type
         ADD CONSTRAINT mt_type_chk CHECK ( mt_type IN (
             'F',
             'R',
  5
             'FR
Table MANAGER_TYPE altered.
SQL> -- insert manager of clayton
SQL> INSERT INTO manager_type VALUES (
  3
             SELECT
  4
                 branch_code
             FROM
                 branch
             WHERE
  8
                 branch_contact_no = '0395413120'
  9
         10.
 10
 11
         'R'
 12
    ) ;/
1 row inserted.
SOL>
SQL> INSERT INTO manager_type VALUES (
 2
  3
             SELECT
                 branch_code
             FROM
  6
                 branch
             WHERE
  8
                 branch_contact_no = '0395413120'
  9
 10
         12,
 11
         'F'
12
1 row inserted.
SQL>
```

```
SQL> COMMIT;
Commit complete.
SOL>
SÕL> ----- BOOK COPY -----
SQL> desc book_copy;
Name Null? Type
BRANCH_CODE NOT NULL NUMBER(2) BC_ID NOT NULL NUMBER(6)
BC_PURCHASE_PRICE NOT NULL NUMBER(7,2)
BC_COUNTER_RESERVE NOT NULL CHAR(1)
BOOK_CALL_NO NOT NULL VARCHAR2(20)
BC_STATE NOT NULL CHAR(1)
SQL> select * from book_copy;
BRANCH_CODE BC_ID BC_PURCHASE_PRICE B BOOK_CALL_NO
13 rows selected.
SOL> ----- LOAN ------
SQL> desc loan;
Name Null? Type
_____
BRANCH_CODE NOT NULL NUMBER(2)
BC_ID NOT NULL NUMBER(6)
LOAN_DATE_TIME NOT NULL DATE
LOAN_DUE_DATE NOT NULL DATE
LOAN_ACTUAL_RETURN_DATE DATE
BOR_NO NOT NULL NUMBER(6)
BRANCH_BC_RETURNED NUMBER(2)
SOL> select * from loan;
BRANCH_CODE BC_ID LOAN_DATE LOAN_DUE_ LOAN_ACTU
                                                   BOR_NO BRANCH_BC_RETURNED
        1 01/JUN/21 15/JUN/21 15/JUN/21 4
2 01/JUN/21 15/JUN/21 15/JUN/21 4
1 01/JUN/21 15/JUN/21 15/JUN/21 5
1 15/JUN/21 29/JUN/21 01/AUG/21 1
1 15/JUN/21 29/JUN/21 05/AUG/21 1
2 17/JUN/21 01/JUL/21 29/JUN/21 3
                                                                  12
13
        13
                                                                      12
        12
        13
                                                                       13
                                                                12
```

12	1	06/AUG/21	20/AUG/21	20/AUG/21	4	12
12	2	06/AUG/21	20/AUG/21	20/AUG/21	5	12
13	1	06/AUG/21	20/AUG/21	18/AUG/21	4	13
12	4	12/AUG/21	26/AUG/21		1	
12	5	13/AUG/21	27/AUG/21		2	
10	20	21/SEP/21	05/OCT/21		100	

#### 12 rows selected.

SQL> select \* from branch;

BRANCH_CODE	BRANCH_NAME	BRANCH_ADDRESS	BRANCH_CON BRANCH_COUNT_E	BOOKS
10	Clayton Library	9-15 Cooke Street, Clayton 3168	0395413120	4
11	Glen Waverley Library	112 Kingsway, Glen Waverley 3150	0395601655	1
12	Mount Waverley Library	41 Miller Crescent, Mount Waverley 3149	0398075022	5
13	Mulgrave Library	36 - 42 Mackie Road, Mulgrave 3170	0395461253	3

SQL>

SQL> set echo on

SQL> set echo off