

1.

```
CREATE TABLE Member1 (  
    Member_Id    NUMBER(5),  
    Member_Name   VARCHAR2(30),  
    Member_address VARCHAR2(50),  
    Acc_Open_Date DATE,  
    Membership_type VARCHAR2(20),  
    Fees_paid     NUMBER(4),  
    Max_Books_Allowed NUMBER(2),  
    Penalty_Amount NUMBER(7,2)  
);
```

```
CREATE TABLE Books1 (  
    Book_No    NUMBER(6),  
    Book_Name   VARCHAR2(30),  
    Author_name VARCHAR2(30),  
    Cost       NUMBER(7,2),  
    Category   CHAR(10)  
);
```

```
CREATE TABLE Issue1 (  
    Lib_Issue_Id NUMBER(10),  
    Book_No    NUMBER(6),  
    Member_Id  NUMBER(5),  
    Issue_Date DATE,  
    Return_date DATE  
);
```

2.

```
desc Member1;  
  
desc Books1;  
  
desc Issue1;
```

```
SQL> desc Member1
```

Name	Null?	Type
MEMBER_ID		NUMBER(5)
MEMBER_NAME		VARCHAR2(30)
MEMBER_ADDRESS		VARCHAR2(50)
ACC_OPEN_DATE		DATE
MEMBERSHIP_TYPE		VARCHAR2(20)
FEES_PAID		NUMBER(4)
MAX_BOOKS_ALLOWED		NUMBER(2)
PENALTY_AMOUNT		NUMBER(7,2)

```
SQL> desc Books1
```

Name	Null?	Type
BOOK_NO		NUMBER(6)
BOOK_NAME		VARCHAR2(30)
AUTHOR_NAME		VARCHAR2(30)
COST		NUMBER(7,2)
CATEGORY		CHAR(10)

```
SQL> desc Issue1
```

Name	Null?	Type
LIB_ISSUE_ID		NUMBER(10)
BOOK_NO		NUMBER(6)
MEMBER_ID		NUMBER(5)
ISSUE_DATE		DATE
RETURN_DATE		DATE

3.

```
drop table Member1;
```

```
SQL> drop table Member1
```

Table MEMBER1 dropped.

Elapsed: 00:00:00.016

4.

```
CREATE TABLE Member1 (  
    Member_Id    NUMBER(5) primary key,  
    Member_Name  VARCHAR2(30),  
    Member_address VARCHAR2(50),  
    Acc_Open_Date DATE,  
    Membership_type VARCHAR2(20) check (Membership_type in ('Lifetime', 'Annual', 'Half  
Yearly', 'Quarterly')),  
    Fees_paid    NUMBER(4),  
    Max_Books_Allowed NUMBER(2),  
    Penalty_Amount NUMBER(7,2)  
);
```

5. alter table Member1 modify member\_name varchar2(30);

6. alter table Issue1 add Reference char(30)

7. alter table Issue1 drop column Reference ;

8. rename issue1 to lib\_issue;

9. INSERT INTO Member1 VALUES ( 1, 'Richa Sharma', 'Pune', TO\_DATE('10-DEC-2005', 'DD-MON-YYYY'), 'Lifetime', 25000, 5, 50);

INSERT INTO Member1 VALUES (2, 'Garima Sen', 'Pune', SYSDATE, 'Annual', 1000, 3, NULL);

10.

INSERT INTO MEMBER\_1 (Member\_Id, Member\_Name, Member\_address, Acc\_Open\_Date,  
Membership\_Type, Fees\_paid, Max\_Books\_Allowed, Penalty\_Amount)

VALUES (3, 'Amit Kumar', 'Mumbai', TO\_DATE('2024-07-01', 'YYYY-MM-DD'), 'Half Yearly', 5000, 4,  
20);

INSERT INTO MEMBER\_1 (Member\_Id, Member\_Name, Member\_address, Acc\_Open\_Date,  
Membership\_Type, Fees\_paid, Max\_Books\_Allowed, Penalty\_Amount)

VALUES (4, 'Sonia Gupta', 'Delhi', TO\_DATE('2023-05-12', 'YYYY-MM-DD'), 'Quarterly', 1500, 2, 10);

INSERT INTO MEMBER\_1 (Member\_Id, Member\_Name, Member\_address, Acc\_Open\_Date,  
Membership\_Type, Fees\_paid, Max\_Books\_Allowed, Penalty\_Amount)

VALUES (5, 'Rajesh Kumar', 'Chennai', TO\_DATE('2025-01-25', 'YYYY-MM-DD'), 'Annual', 3000, 6, 15);

INSERT INTO MEMBER\_1 (Member\_Id, Member\_Name, Member\_address, Acc\_Open\_Date,  
Membership\_Type, Fees\_paid, Max\_Books\_Allowed, Penalty\_Amount)

VALUES (6, 'Neha Verma', 'Kolkata', TO\_DATE('2023-11-05', 'YYYY-MM-DD'), 'Lifetime', 25000, 5, 25);

```
INSERT INTO MEMBER_1 (Member_Id, Member_Name, Member_address, Acc_Open_Date,
Membership_Type, Fees_paid, Max_Books_Allowed, Penalty_Amount)

VALUES (7, 'Vikas Jain', 'Bangalore', TO_DATE('2024-09-15', 'YYYY-MM-DD'), 'Half Yearly', 3500, 3,
30);
```

BOOKS:

```
INSERT INTO BOOKS1 (Book_No, Book_Name, Author_name, Cost, Category)
```

```
VALUES (101, 'The Alchemist', 'Paulo Coelho', 399.99, 'Fiction');
```

```
INSERT INTO BOOKS1 (Book_No, Book_Name, Author_name, Cost, Category)
```

```
VALUES (102, 'The Da Vinci Code', 'Dan Brown', 499.50, 'Mystery');
```

```
INSERT INTO BOOKS1 (Book_No, Book_Name, Author_name, Cost, Category)
```

```
VALUES (103, 'Atomic Habits', 'James Clear', 299.75, 'Self-Help');
```

```
INSERT INTO BOOKS1 (Book_No, Book_Name, Author_name, Cost, Category)
```

```
VALUES (104, 'The Power of Now', 'Eckhart Tolle', 450.00, 'Spiritual');
```

```
INSERT INTO BOOKS1 (Book_No, Book_Name, Author_name, Cost, Category)
```

```
VALUES (105, 'The Silent Patient', 'Alex Michaelides', 399.00, 'Thriller');
```

ISSUE:

```
INSERT INTO LIB_ISSUE (Lib_Issue_Id, Book_No, Member_Id, Issue_Date, Return_Date)
```

```
VALUES (1, 101, 1, TO_DATE('2006-12-10', 'YYYY-MM-DD'), TO_DATE('2006-12-24', 'YYYY-MM-DD'));
```

```
INSERT INTO LIB_ISSUE (Lib_Issue_Id, Book_No, Member_Id, Issue_Date, Return_Date)
```

```
VALUES (2, 102, 2, TO_DATE('2006-11-10', 'YYYY-MM-DD'), TO_DATE('2007-01-15', 'YYYY-MM-DD'));
```

```
INSERT INTO LIB_ISSUE (Lib_Issue_Id, Book_No, Member_Id, Issue_Date, Return_Date)
```

```
VALUES (3, 103, 3, TO_DATE('2004-07-01', 'YYYY-MM-DD'), TO_DATE('2004-07-14', 'YYYY-MM-DD'));
```

```
INSERT INTO LIB_ISSUE (Lib_Issue_Id, Book_No, Member_Id, Issue_Date, Return_Date)
```

```
VALUES (4, 104, 4, TO_DATE('2006-05-12', 'YYYY-MM-DD'), TO_DATE('2006-05-26', 'YYYY-MM-DD'));
```

```
INSERT INTO LIB_ISSUE (Lib_Issue_Id, Book_No, Member_Id, Issue_Date, Return_Date)
```

```
VALUES (5, 105, 5, TO_DATE('2006-01-25', 'YYYY-MM-DD'), TO_DATE('2006-02-08', 'YYYY-MM-DD'));
```

11.

```
alter table member1 modify member_name varchar2(30);
```

12.

```
SQL> INSERT INTO MEMBER1 (Member_Id, Member_Name, Member_address, Acc_Open_Date, Membership_Type, Fees_paid, Max_Books_Allowed, Penalty_Amount)
VALUES (8, 'Amit Kumar', 'Mumbai', TO_DATE('2024-07-01', 'YYYY-MM-DD'), 'Half Yearly', 5000, 110, 20)
```

ORA-01438: value 110 greater than specified precision (2, 0) for column

<https://docs.oracle.com/error-help/db/ora-01438/>  
Error at Line: 4 Column: 8

13.

create table member101 as select \* from MEMBER1;

14. ALTER TABLE member1 modify max\_books\_allowed constraint Con\_maxbook  
check(max\_books\_allowed < 100)

ALTER TABLE member1 modify penalty\_amount constraint Con\_penalty  
check(penalty\_amount<=1000)

15. Drop table books1

16. create table books1

(

Book\_No number(6) Primary key,

Book\_Name VarChar2(30) not null,

Author\_name Varchar2(30),

Cost Number(7,2),

category Char(10) check (category in ('Science','Fiction','Database','others'))

)

17. INSERT INTO books1 VALUES (101, 'Let us C', 'Denis Ritchie', 450, 'Science');

INSERT INTO books1 VALUES (102, 'Oracle – Complete Ref', 'Loni', 550, 'Database');

INSERT INTO books1 VALUES (103, 'Mastering SQL', 'Loni', 250, 'Database');

INSERT INTO books1 VALUES (104, 'PL SQL-Ref', 'Scott Urman', 750, 'Database');

18. Insert into books1 values(&Book\_No,'&Book\_Name','&Author\_Name',&cost,'&category');

19. CREATE TABLE book101 AS SELECT \* FROM books1 WHERE 1=0;

20. insert into book101 select \* from books1

21. commit

22. select \* from books1;

select \* from book101

select \* from member1;

select \* from lib\_issue;

select \* from member101;

23. INSERT INTO books1 VALUES (105, 'National Geographic', 'Adis Scott', 1000, 'Science');

24. rollback;

25. ategory Char(10) check (category in ('Science','Fiction','Database','others'))

26. Rename lib\_issue to issue;

27. Drop table issue;

28. CREATE TABLE ISSUE(

Lib\_Issue\_Id Number(10) Primary key,

Book\_No Number(6) references Books1(Book\_No),

Member\_Id Number(5) references MEMBER1(Member\_Id),

Issue\_Date date,

Return\_date date,

CONSTRAINT Val CHECK (Issue\_Date< Return\_date)

);

29. INSERT INTO issue VALUES (7001, 101, 1, TO\_DATE('10-DEC-2006','DD-MON-YYYY'), NULL);

INSERT INTO issue VALUES (7002, 102, 2, TO\_DATE('25-DEC-2006','DD-MON-YYYY'), NULL);

INSERT INTO issue VALUES (7003, 104, 1, TO\_DATE('15-JAN-2006','DD-MON-YYYY'), NULL);

INSERT INTO issue VALUES (7004, 101, 1, TO\_DATE('04-JUL-2006','DD-MON-YYYY'), NULL);

INSERT INTO issue VALUES (7005, 104, 2, TO\_DATE('15-NOV-2006','DD-MON-YYYY'), NULL);

INSERT INTO issue VALUES (7006, 101, 3, TO\_DATE('18-FEB-2006','DD-MON-YYYY'), NULL);

30.commit

31. Alter table issue disable primary key;

Alter table issue disable constraint SYS\_C003234844 ;

alter table issue disable constraint SYS\_C003234850;

alter table issue disable constraint VAL;

32. INSERT INTO issue VALUES (7009, 101, null, TO\_DATE('18-FEB-2006','DD-MON-YYYY'), NULL);

33.

```
SQL> Alter table issue enable primary key
```

Table ISSUE altered.

Elapsed: 00:00:00.024

---

```
SQL> Alter table issue enable constraint SYS_C003234844
```

Table ISSUE altered.

Elapsed: 00:00:00.012

---

```
SQL> alter table issue enable constraint SYS_C003234850
```

ORA-02298: cannot validate (SQL\_KPT77L4A1TCAD6VVV2BZFIO07T.SYS\_C003234850) - parent keys not found

<https://docs.oracle.com/error-help/db/ora-02298/>  
Error at Line: 6 Column: 0

---

```
SQL> alter table issue enable constraint VAL
```

Table ISSUE altered.

Elapsed: 00:00:00.009

34. Delete from issue where lib\_issue\_id=7007;

Alter table issue enable primary key;

Alter table issue enable constraint SYS\_C003234844 ;

alter table issue enable constraint SYS\_C003234850;

alter table issue enable constraint VAL;

35.

```
SQL> delete from member1 where Member_Id=1
```

ORA-02292: integrity constraint (SQL\_KPT77L4A1TCAD6VVV2BZFIO07T.SYS\_C003234909) violated - child record found

<https://docs.oracle.com/error-help/db/ora-02292/>  
Error at Line: 4 Column: 0

36. update issue set Return\_date=Issue\_Date+15 where Lib\_Issue\_Id in (7004,7005).

37. update member1 set penalty\_amount=100 where member\_name='Garima Sen';

38.savepoint x

39.delete from issue where member\_id=1 and issue\_date<'10-dec-06'

40.

```
SQL> delete from books1 where category not in('RDBMS','Database')
```

ORA-02292: integrity constraint (SQL\_KPT77L4A1TCAD6VVV2BZFI007T.SYS\_C003234908) violated - child record found

<https://docs.oracle.com/error-help/db/ora-02292/>  
Error at Line: 4 Column: 0

41.Rollback x;

42.commit;

43.drop table member101

44.drop table book101

45.

```
SQL> desc member1
```

Name	Null?	Type
MEMBER_ID	NOT NULL	NUMBER(5)
MEMBER_NAME		VARCHAR2(30)
MEMBER_ADDRESS		VARCHAR2(50)
ACC_OPEN_DATE		DATE
MEMBERSHIP_TYPE		VARCHAR2(20)
FEES_PAID		NUMBER(5)
MAX_BOOKS_ALLOWED		NUMBER(2)
PENALTY_AMOUNT		NUMBER(7,2)

```
SQL> desc books1
```

Name	Null?	Type
BOOK_NO	NOT NULL	NUMBER(6)
BOOK_NAME	NOT NULL	VARCHAR2(30)
AUTHOR_NAME		VARCHAR2(30)
COST		NUMBER(7,2)
CATEGORY		CHAR(10)

```
SQL> desc issue
```

Name	Null?	Type
LIB_ISSUE_ID	NOT NULL	NUMBER(10)
BOOK_NO		NUMBER(6)
MEMBER_ID		NUMBER(5)
ISSUE_DATE		DATE
RETURN_DATE		DATE

46. CREATE SEQUENCE no\_seq START WITH 100 INCREMENT BY 2 MINVALUE 100 MAXVALUE 200 NOCYCLE;

47. drop sequence no\_seq;



48. CREATE SEQUENCE book\_seq START WITH 100 INCREMENT BY 1 MINVALUE 100 MAXVALUE 1000 NOCYCLE;

49. CREATE SEQUENCE member\_seq START WITH 1 INCREMENT BY 1 MINVALUE 1 MAXVALUE 100 NOCYCLE;

50. drop sequence book\_seq;

drop sequence member\_seq;