```
CREATE TABLE Member (
    Member_Id       NUMBER(5)       PRIMARY KEY,
    Member_Name     VARCHAR2(30)    NOT NULL,
    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)
);
```

INSERT INTO Member VALUES (101, 'Ravi Kumar', 'Delhi', DATE '2006-01-10', 'Annual', 500, 5, 120.50);

INSERT INTO Member VALUES (102, 'Geeta Sharma', 'Mumbai', DATE '2006-05-15', 'Lifetime', 1000, 10, 50.00);

INSERT INTO Member VALUES (103, 'Loni Das', 'Kolkata', DATE '2007-03-12', 'Quarterly', 300, 3, 200.00);

INSERT INTO Member VALUES (104, 'Rohit Iyer', 'Chennai', DATE '2006-07-20', 'Half Yearly', 400, 4, 0.00);

INSERT INTO Member VALUES (105, 'Girish Rathi', 'Pune', DATE '2008-08-25', 'Annual', 500, 5, 75.25);

	MEMBER_ID	MEMBER_NAME	MEMBER_ADDRESS	ACC_OPEN_DATE	MEMBERSHIP_TYPE	FEES_PAID	MAX_BOOKS_ALLO	PENALTY_AMOUNT
1	101	Ravi Kumar	Delhi	1/10/2006, 12:00:0(	Annual	500	5	120.5
2	102	Geeta Sharma	Mumbai	5/15/2006, 12:00:0(	Lifetime	1000	10	50
3	103	Loni Das	Kolkata	3/12/2007, 12:00:0(	Quarterly	300	3	200
4	104	Rohit Iyer	Chennai	7/20/2006, 12:00:0(	Half Yearly	400	4	0
5	105	Girish Rathi	Pune	8/25/2008, 12:00:0(	Annual	500	5	75.25

```
CREATE TABLE Books (
    Book_No     NUMBER(6)     PRIMARY KEY,
    Book_Name   VARCHAR2(30)  NOT NULL,
    Author_name VARCHAR2(30),
    Cost        NUMBER(7,2),
    Category    CHAR(10)
);
```
INSERT INTO Books VALUES (7001, 'SQL Basics', 'Loni', 550, 'Database');

INSERT INTO Books VALUES (7002, 'Oracle PL/SQL', 'Sundar', 650, 'RDBMS');

INSERT INTO Books VALUES (7003, 'Data Science 101', 'Anita', 1200, 'Science');

INSERT INTO Books VALUES (7004, 'Fictional Tales', 'Ramesh', 450, 'Fiction');

INSERT INTO Books VALUES (7005, 'Management Guru', 'Kapoor', 800, 'Management');

INSERT INTO Books VALUES (7006, 'Advanced SQL', 'Loni', 580, 'Database');

INSERT INTO Books VALUES (7007, 'Python for Science', 'Maya', 700, 'Science');

INSERT INTO Books VALUES (7008, 'Cloud Databases', 'Arjun', 720, 'Database');

	BOOK_NO	BOOK_NAME	AUTHOR_NAME	COST	CATEGORY
1	7001	SQL Basics	Loni	550	Database
2	7002	Oracle PL/SQL	Sundar	650	RDBMS
3	7003	Data Science 101	Anita	1200	Science
4	7004	Fictional Tales	Ramesh	450	Fiction
5	7005	Management Guru	Kapoor	800	Management
6	7006	Advanced SQL	Loni	580	Database
7	7007	Python for Science	Maya	700	Science
8	7008	Cloud Databases	Arjun	720	Database

```
CREATE TABLE Issue (
    Lib_Issue_Id NUMBER(10) PRIMARY KEY,
    Book_No      NUMBER(6),
    Member_Id    NUMBER(5),
    Issue_Date   DATE,
    Return_Date  DATE,
    CONSTRAINT fk_book FOREIGN KEY (Book_No) REFERENCES Books(Book_No),
    CONSTRAINT fk_member FOREIGN KEY (Member_Id) REFERENCES Member(Member_Id)
);
```
INSERT INTO Issue VALUES (90001, 7001, 101, DATE '2006-07-01', DATE '2006-07-20');

INSERT INTO Issue VALUES (90002, 7002, 102, DATE '2006-08-15', NULL); -- not returned

INSERT INTO Issue VALUES (90003, 7006, 101, DATE '2006-07-10', NULL); -- blank return_date

INSERT INTO Issue VALUES (90004, 7003, 103, DATE '2007-04-05', DATE '2007-05-10');

INSERT INTO Issue VALUES (90005, 7005, 104, DATE '2006-09-01', DATE '2006-09-25');

INSERT INTO Issue VALUES (90006, 7007, 101, DATE '2006-07-01', DATE '2006-07-15');

INSERT INTO Issue VALUES (90007, 7008, 105, DATE '2008-09-01', NULL);

	LIB_ISSUE_ID	BOOK_NO	MEMBER_ID	ISSUE_DATE	RETURN_DATE
1	90001	7001	101	7/1/2006, 12:00:00	7/20/2006, 12:00:0(
2	90002	7002	102	8/15/2006, 12:00:0(	(null)
3	90003	7006	101	7/10/2006, 12:00:0(	(null)
4	90004	7003	103	4/5/2007, 12:00:00	5/10/2007, 12:00:0(
5	90005	7005	104	9/1/2006, 12:00:00	9/25/2006, 12:00:0(
6	90006	7007	101	7/1/2006, 12:00:00	7/15/2006, 12:00:0(
7	90007	7008	105	9/1/2008, 12:00:00	(null)

1. `select * from BOOKS where AUTHOR_NAME = 'Loni' and cost < 600;`

	BOOK_NO	BOOK_NAME	AUTHOR_NAME	COST	CATEGORY
1	7001	SQL Basics	Loni	550	Database
2	7006	Advanced SQL	Loni	580	Database

2. `select Lib_Issue_Id,Book_No,member_id,Issue_Date from ISSUE where RETURN_DATE is null;`

	LIB_ISSUE_ID	BOOK_NO	MEMBER_ID	ISSUE_DATE
1	90002	7002	102	8/15/2006, 12:00:0(
2	90003	7006	101	7/10/2006, 12:00:0(
3	90007	7008	105	9/1/2008, 12:00:00

3. `UPDATE issue set RETURN_DATE = '31-Dec-06' where RETURN_DATE is null and book_no not in (7005,7006);`

	LIB_ISSUE_ID	BOOK_NO	MEMBER_ID	ISSUE_DATE	RETURN_DATE
1	90001	7001	101	7/1/2006, 12:00:00	7/20/2006, 12:00:0(
2	90002	7002	102	8/15/2006, 12:00:0(	12/31/2006, 12:00:(
3	90003	7006	101	7/10/2006, 12:00:0(	(null)
4	90004	7003	103	4/5/2007, 12:00:00	5/10/2007, 12:00:0(
5	90005	7005	104	9/1/2006, 12:00:00	9/25/2006, 12:00:0(
6	90006	7007	101	7/1/2006, 12:00:00	7/15/2006, 12:00:0(
7	90007	7008	105	9/1/2008, 12:00:00	12/31/2006, 12:00:(

4. `select * from issue where months_between(RETURN_DATE , ISSUE_DATE) >= 1;`

	LIB_ISSUE_ID	BOOK_NO	MEMBER_ID	ISSUE_DATE	RETURN_DATE
1	90002	7002	102	8/15/2006, 12:00:0(	12/31/2006, 12:00:(
2	90004	7003	103	4/5/2007, 12:00:00	5/10/2007, 12:00:0(

5. `select book_name from BOOKS where cost BETWEEN 500 and 750 and category = 'Database';`

	BOOK_NAME
1	SQL Basics
2	Advanced SQL
3	Cloud Databases

6. `select book_name from books where category in ('Science','Database','Fiction','Management');`

	BOOK_NAME
1	SQL Basics
2	Data Science 101
3	Fictional Tales
4	Management Guru
5	Advanced SQL
6	Python for Science
7	Cloud Databases

7. `select member_name,penalty_amount from member order by penalty_amount desc;`

	MEMBER_NAME	PENALTY_AMOUNT
1	Loni Das	200
2	Ravi Kumar	120.5
3	Girish Rathi	75.25
4	Geeta Sharma	50
5	Rohit Iyer	0

8. `select book_name from books order by category  ASC,cost DESC;`

	BOOK_NAME
1	Cloud Databases
2	Advanced SQL
3	SQL Basics
4	Fictional Tales
5	Management Guru
6	Oracle PL/SQL
7	Data Science 101
8	Python for Science

9. `select book_name from books where book_name like '%SQL%';`

	BOOK_NAME
1	SQL Basics
2	Oracle PL/SQL
3	Advanced SQL

10. `select member_name from member where member_name like 'R%I%' or member_name like 'R%i%' or member_name like 'G%i%' or member_name like 'G%I%';`

	MEMBER_NAME
1	Ravi Kumar
2	Rohit Iyer
3	Girish Rathi

11. `select initcap(book_name) as book_name ,upper(author_name) as author_name from books order by book_name desc;`

	BOOK_NAME	AUTHOR_NAME
1	Sql Basics	LONI
2	Python For Science	MAYA
3	Oracle Pl/Sql	SUNDAR
4	Management Guru	KAPOOR
5	Fictional Tales	RAMESH
6	Data Science 101	ANITA
7	Cloud Databases	ARJUN
8	Advanced Sql	LONI

12. `select Lib_Issue_Id,book_no ,to_char(issue_date,'DAY,MONTH,DD,YYYY') as issue_date,to_char(return_date,'DAY,MONTH,DD,YYYY') as return_date from issue where member_id=101;`

	LIB_ISSUE_ID	BOOK_NO	ISSUE_DATE	RETURN_DATE
1	90001	7001	SATURDAY ,JULY ,01,2006	THURSDAY ,JULY ,20,2006
2	90003	7006	MONDAY ,JULY ,10,2006	*(null)*
3	90006	7007	SATURDAY ,JULY ,01,2006	SATURDAY ,JULY ,15,2006

13.
```
Select book_no,book_name,author_name,cost,
CASE
    when category='Database' then 'D'
    when category='Science' then 'S'
    when category='RDBMS' then 'R'
    else 'O'
    end
    as Category from books;
```

	BOOK_NO	BOOK_NAME	AUTHOR_NAME	COST	CATEGORY
1	7001	SQL Basics	Loni	550	D
2	7002	Oracle PL/SQL	Sundar	650	R
3	7003	Data Science 101	Anita	1200	S
4	7004	Fictional Tales	Ramesh	450	O
5	7005	Management Guru	Kapoor	800	O
6	7006	Advanced SQL	Loni	580	D
7	7007	Python for Science	Maya	700	S
8	7008	Cloud Databases	Arjun	720	D

14. `select member_name from member where to_char(ACC_OPEN_DATE,'YYYY')='2006';`

	MEMBER_NAME
1	Ravi Kumar
2	Geeta Sharma
3	Rohit Iyer

15.
```
select Lib_Issue_Id,issue_date,return_date,
CASE
    when RETURN_DATE is not null then (return_date – issue_date)
    else (sysdate – issue_date)
    end
    as no_of_days from ISSUE;
```

	LIB_ISSUE_ID	ISSUE_DATE	RETURN_DATE	NO_OF_DAYS
1	90001	7/1/2006, 12:00:00	7/20/2006, 12:00:0(	19
2	90002	8/15/2006, 12:00:0(	12/31/2006, 12:00:(	138
3	90003	7/10/2006, 12:00:0(	(null)	6986.741782407407
4	90004	4/5/2007, 12:00:00	5/10/2007, 12:00:0(	35
5	90005	9/1/2006, 12:00:00	9/25/2006, 12:00:0(	24
6	90006	7/1/2006, 12:00:00	7/15/2006, 12:00:0(	14

16. `SELECT * from MEMBER  order by Acc_Open_Date asc;`

	MEMBER_ID	MEMBER_NAME	MEMBER_ADDRESS	ACC_OPEN_DATE	MEMBERSHIP_TYPE	FEES_PAID	MAX_BOOKS_ALLO	PENALTY_AMOUNT
1	101	Ravi Kumar	Delhi	1/10/2006, 12:00:0(	Annual	500	5	120.5
2	102	Geeta Sharma	Mumbai	5/15/2006, 12:00:0(	Lifetime	1000	10	50
3	104	Rohit Iyer	Chennai	7/20/2006, 12:00:0(	Half Yearly	400	4	0
4	103	Loni Das	Kolkata	3/12/2007, 12:00:0(	Quarterly	300	3	200
5	105	Girish Rathi	Pune	8/25/2008, 12:00:0(	Annual	500	5	75.25

17. `select count(book_no) from ISSUE where MEMBER_ID=101;`

	COUNT(BOOK_NO)
1	3

18. `select sum(penalty_amount) as Penalty_sum from member;`

	PENALTY_SUM
1	445.75

19. `select count(member_id) as Member_count from member;`

	MEMBER_COUNT
1	5

20. `SELECT count(book_no) from issue;`

	COUNT(BOOK_NO)
	7

21. `select avg(fees_paid) as Membership_fees_paid from member;`

	MEMBERSHIP_FEES
1	540

22. `select months_between(return_date,issue_date) as Months_between from issue;`

	MONTHS_BETWEEN
1	0.6129032258064516
2	4.516129032258065
3	(null)
4	1.1612903225806452
5	0.7741935483870968
6	0.45161290322580644
7	-20.032258064516128

23. `select member_name,length(member_name) as Length_of_name from member;`

	MEMBER_NAME	LENGTH_OF_NAME
1	Ravi Kumar	10
2	Geeta Sharma	12
3	Loni Das	8
4	Rohit Iyer	10
5	Girish Rathi	12

24. `select substr(membership_type,1,5) as Membership_type from member;`

	MEMBERSHIP_TYPE
1	Annua
2	Lifet
3	Quart
4	Half
5	Annua

25. `select issue_date,to_char(last_day(issue_date),'DAY') as Last_day from issue;`

	ISSUE_DATE	LAST_DAY
1	7/1/2006, 12:0 👁	MONDAY
2	8/15/2006, 12:00:0(	THURSDAY
3	7/10/2006, 12:00:0(	MONDAY
4	4/5/2007, 12:00:00	MONDAY
5	9/1/2006, 12:00:00	SATURDAY
6	7/1/2006, 12:00:00	MONDAY
7	9/1/2008, 12:00:00	TUESDAY