DBMS PROJECT

Group Members:

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Project Title :
Library Management System

Synopsis: This project database exhibits how the books are issued and returned to library in organized manner and how the library works.

ENTITIES:

BRANCH

EMPLOYEES

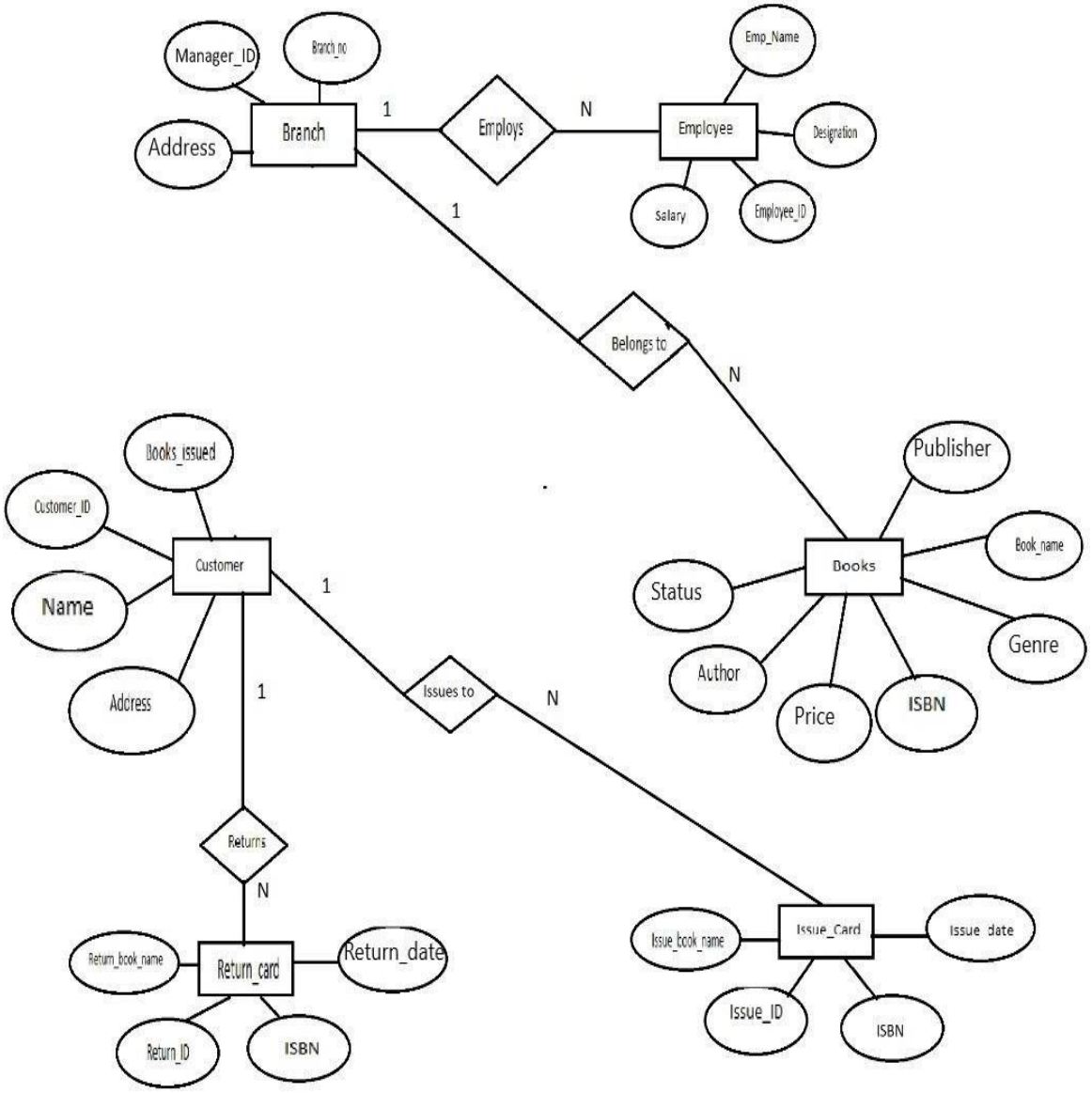
CUSTOMER

BOOKS

ISSUECARD

RETURNCARD

ER Diagram:


Manager_ID
Branch_no
Address
Branch
1
Employs
N
Emp_Name
Emplcyee
Designation
Salary
Employee_ID
1
Belongs to
N
Books_issued
Customer_ID
Customer
Name
Address
1
Issues to
N
Publisher
Book_name
Books
Status
Genre
Author
Price
ISBN
1
Returns
N
Return_book_name
Return_card
Return_date
Return_ID
ISBN
Issue_book_name
Issue_Card
Issue_date
Issue_ID
ISBN

Normalization And Functional Dependencies:

The tables we created in this project are all in BCNF normal form:

1>In Table BOOKS: ISBN IS THE PRIMARY KEY AND BRANCH_NO AS FOREIGN KEY REFERENCES TO BRANCH TABLE.

2>In Table BRANCH: BRANCH_NO IS THE PRIMARY KEY AND DETERMINES ALL OTHER VALUES UNIQUELY.

3>In Table EMPLOYEES: EMP_ID IS THE PRIMARY KEY AND DETERMINES ALL OTHER EMPLOYEES UNIQUELY.

We decomposed into 2 tables, BRANCH and EMPLOYEES so that each table is in BCNF FORM.

4>In Table CUSTOMER: CUSTOMER_ID IS THE PRIMARY KEY AND BRANCH_NO IS FOREIGN KEY REFERENCING TO BRANCH TABLE.

5>In Table ISSUECARD: ISSUE_ID IS THE PRIMARY KEY AND CUSTOMER_ID IS FOREIGN KEY REFERENCING TO CUSTOMER TABLE.

6> In Table RETURNCARD: RETURN_ID IS THE PRIMARY KEY AND CUSTOMER_ID IS FOREIGN KEY REFERENCING TO CUSTOMER TABLE.

All our Tables are in normalized form since there is neither partial dependency nor transitive dependency. In all the tables, all attributes are dependent on the Primary Key.

Creating DataBase using SQL Developer

BOOKS TABLE:

```
CREATE TABLE BOOKS(ISBNINT,GENRE VARCHAR(25),TITLE
VARCHAR(25),PUBLISHER VARCHAR(25),PRICE INT,AUTHOR
VARCHAR(25),STATUS VARCHAR(25),BRANCH_NO INT);
```

EMPLOYEES TABLE:

```
CREATE TABLE EMPLOYEES(EMP_ID INT,SALARY INT,DES
VARCHAR(25),EMP_NAME VARCHAR(25),BRANCH_NO INT);
```

BRANCH TABLE:

```
CREATE TABLE BRANCH(BRANCH_NO INT,MANAGER_ID
INT,B_ADDRESS VARCHAR(25));
```

CUSTOMER TABLE:

```
CREATE TABLE CUSTOMER(CUSTOMER_ID
INT,BOOKS_ISSUED INT,CUSTOMER_NAME
VARCHAR(25),CUS_ADDRESS VARCHAR(25),BRANCH_NO
INT);
```

ISSUECARD TABLE:

```
CREATE TABLE ISSUECARD( ISSUE_ID INT,
ISSUE_DATEDATE,ISBN INT, ISSUE_BOOK_NAME
VARCHAR(25),CUSTOMER_ID INT);
```

RETURNCARD TABLE:

```
CREATE TABLE RETURNCARD( RETURN_ID INT,
RETURN_DATE DATE,ISBN INT, RETURN_BOOK_NAME
VARCHAR(25) ,CUSTOMER_ID INT);
```

Inserting Values In DataBase

Insertion Into BOOKS Table:

```
INSERT INTO BOOKS  VALUES(101, 'HORROR', 'IT',
'BLOOMSBURRY',500,'STEPHEN KING','VERY GOOD',301);

INSERT INTO BOOKS VALUES(102,'FANTASY','HARRY
POTTER','BLOOMSBURRY',1000,'JK ROWLING','GOOD',302);

INSERT INTO BOOKS VALUES(103,'PSYCHOLOGICAL
THRILLER','MISERY','PENGUIN',1500,'STEPHEN KING','VERY
GOOD',303);

INSERT INTO BOOKS VALUES(104,'PSYCHOLOGICAL HORROR','THE
SHINING','PUFFIN',5000,'STEPHEN KING','EXCELLENT',304);

INSERT INTO BOOKS VALUES(105,'DETECTIVE THRILLER','SHERLOCK
HOLMES','PRAJAPATI',2500,'SIR ARTHUR CONAN DOYLE',
'GOOD',305);

INSERT INTO BOOKS VALUES(106,'PHILOSOPHY','WAR AND
PEACE','BLOOMSBURRY',1200,'LEO TOLSTOY','AVERAGE',301);

INSERT INTO BOOKS VALUES(107,'ROMANCE','ROMEO AND
JULIET','ROYAL',5600,'WILLIAM SHAKESPEARE','VERY GOOD',302);

INSERT INTO BOOKS VALUES(108,'BIOGRAPHY','THE GOOD
BOATMAN','NATIONAL PRESS',3500,'RAJMOHAN GANDHI',
'GOOD',303);

INSERT INTO BOOKS VALUES(109,'THRILLER','TINTIN',
'SCOTTISH PRESS',500,'HERGE','VERY GOOD',305);
```

INSERT INTO BOOKS VALUES(110,'FANTASY','THE LORD OF THE RINGS','BLOOMSBURRY',500,'JJ TOLKIENS','EXCELLENT',306);

INSERT INTO BOOKS VALUES(111, 'HORROR', 'SERPENT', 'PENGUIN',5100,'RAMACHAND',' POOR',304);

Script Output | Query Result

SQL | All Rows Fetched: 11 in 0.02 seconds

	ISBN	GENRE	TITLE	PUBLISHER	PRICE	AUTHOR	STATUS	BRANCH_NO
1	101	HORROR	IT	BLOOMSBURRY	500	STEPHEN KING	VERY GOOD	301
2	102	FANTASY	HARRY POTTER	BLOOMSBURRY	1000	JK ROWLING	GOOD	302
3	103	PSYCHOLOGICAL THRILLER	MISERY	PENGUIN	1500	STEPHEN KING	VERY GOOD	303
4	104	PSYCHOLOGICAL HORROR	THE SHINING	PUFFIN	5000	STEPHEN KING	EXCELLENT	304
5	105	DETECTIVE THRILLER	SHERLOCK HOLMES	PRAJAPATI	2500	SIR ARTHUR CONAN DOYLE	GOOD	305
6	106	PHILOSOPHY	WAR AND PEACE	BLOOMSBURRY	1200	LEO TOLSTOY	AVERAGE	301
7	107	ROMANCE	ROMEO AND JULIET	ROYAL	5600	WILLIAM SHAKESPEARE	VERY GOOD	302
8	108	BIOGRAPHY	THE GOOD BOATMAN	NATIONAL PRESS	3500	RAJMOHAN GANDHI	GOOD	303
9	109	THRILLER	TINTIN	SCOTTISH PRESS	500	HERGE	VERY GOOD	305
10	110	FANTASY	THE LORD OF THE RINGS	BLOOMSBURRY	500	JJ TOLKIENS	EXCELLENT	306
11	111	HORROR	SERPENT	PENGUIN	5100	RAMACHAND	POOR	304

Insertion into BRANCH Table:

INSERT INTO BRANCH VALUES(301,900,'ABC ROAD DELHI');

INSERT INTO BRANCH VALUES(302,901,'MG ROAD ');

INSERT INTO BRANCH VALUES(303,902,'KALUSARAI');

INSERT INTO BRANCH VALUES(304,903,'PRESS COLONY');

INSERT INTO BRANCH VALUES(305,904,'XYZ LANE');

INSERT INTO BRANCH VALUES(306,905,'SALT LAKE’);

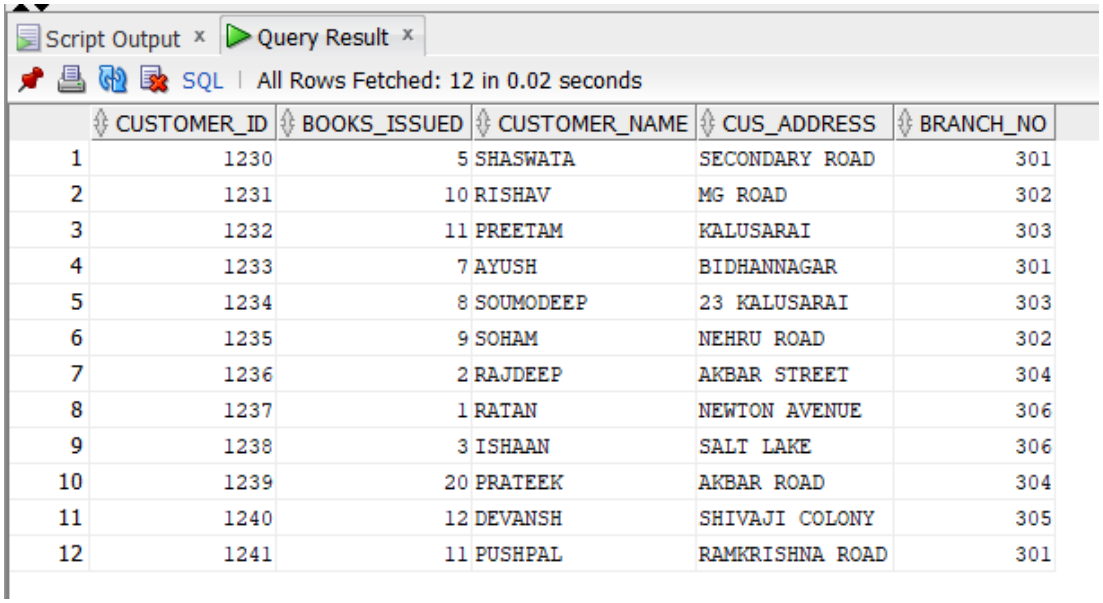
Script Output | Query Result

SQL | All Rows Fetched: 6 in 0.009 seconds

	BRANCH_NO	MANAGER_ID	B_ADDRESS
1	301	900	ABC ROAD DELHI
2	302	901	MG ROAD
3	303	902	KALUSARAI
4	304	903	PRESS COLONY
5	305	904	XYZ LANE
6	306	905	SALT LAKE

Insertion into CUSTOMER Table:

```
INSERT INTO CUSTOMER VALUES(1230,5,'SHASWATA','SECONDARY ROAD',301);

INSERT INTO CUSTOMER VALUES(1231,10,'RISHAV','MG ROAD',302);

INSERT INTO CUSTOMER VALUES(1232, 11, 'PREETAM', 'KALUSARAI',303);

INSERT INTO CUSTOMER VALUES(1233, 7, 'AYUSH', 'BIDHANNAGAR',301);

INSERT INTO CUSTOMER VALUES(1234,8,'SOUMODEEP', '23 KALUSARAI',303);

INSERT INTO CUSTOMER VALUES(1235,9,'SOHAM', 'NEHRU ROAD',302);

INSERT INTO CUSTOMER VALUES(1236,2,'RAJDEEP', 'AKBAR STREET',304);

INSERT INTO CUSTOMER VALUES(1237,1,'RATAN', 'NEWTON AVENUE',306);

INSERT INTO CUSTOMER VALUES(1238,3,'ISHAAN','SALT  LAKE',306);

INSERT INTO CUSTOMER VALUES(1239,20,'PRATEEK', 'AKBAR ROAD',304);

INSERT INTO CUSTOMER VALUES(1240,12,'DEVANSH','SHIVAJI COLONY',305);

INSERT INTO CUSTOMER VALUES(1241,11,'PUSHPAL','RAMKRISHNA ROAD',301);
```



Script Output | Query Result

SQL | All Rows Fetched: 12 in 0.02 seconds

	CUSTOMER_ID	BOOKS_ISSUED	CUSTOMER_NAME	CUS_ADDRESS	BRANCH_NO
1	1230	5	SHASWATA	SECONDARY ROAD	301
2	1231	10	RISHAV	MG ROAD	302
3	1232	11	PREETAM	KALUSARAI	303
4	1233	7	AYUSH	BIDHANNAGAR	301
5	1234	8	SOUMODEEP	23 KALUSARAI	303
6	1235	9	SOHAM	NEHRU ROAD	302
7	1236	2	RAJDEEP	AKBAR STREET	304
8	1237	1	RATAN	NEWTON AVENUE	306
9	1238	3	ISHAAN	SALT LAKE	306
10	1239	20	PRATEEK	AKBAR ROAD	304
11	1240	12	DEVANSH	SHIVAJI COLONY	305
12	1241	11	PUSHPAL	RAMKRISHNA ROAD	301

Insertion Into EMPLOYEES Table:

INSERT INTO EMPLOYEES VALUES(30101,56000,'SR LIBRARIAN', 'ROHAN ANAND',301);

INSERT INTO EMPLOYEES VALUES(30102,40000,'DATABASE MANAGER','RITESH MISHRA',301);

INSERT INTO EMPLOYEES VALUES(30103, 300000, 'MANAGER','RITESH KHAN',301);

INSERT INTO EMPLOYEES VALUES(30201,66000,'SR LIBRARIAN', 'NURUL HAQUE',302);

INSERT INTO EMPLOYEES VALUES(30202,26000,'CLERK','ANANDA DEY',302);

INSERT INTO EMPLOYEES VALUES(30203, 76000, 'MANAGER', 'SWARUP SARKAR',302);

INSERT INTO EMPLOYEES VALUES(30204, 16000, 'GUARDSMAN','SUPRATIM MISHRA',302);

INSERT INTO EMPLOYEES VALUES(30301, 86000, 'MANAGER','SANJAY YADAV',303);

INSERT INTO EMPLOYEES VALUES(30302,36000,'SR LIBRARIAN','TITU BISOI',303);

INSERT INTO EMPLOYEES VALUES(30401, 96000, 'MANAGER','PRADEEP RAOUTH',304);

INSERT INTO EMPLOYEES VALUES(30402,40000,'DATABASE MANAGER','BITTU MISHRA',304);

INSERT INTO EMPLOYEES VALUES(30501, 100000, 'MANAGER','ANKIT ANAND',305);

INSERT INTO EMPLOYEES VALUES(30601, 200000, 'MANAGER','ROHAN BASU',306);

INSERT INTO EMPLOYEES VALUES(30502,56000,'COMPUTER TECH','MOHIBUL ISLAM',305);

INSERT INTO EMPLOYEES VALUES(30602, 40000, 'CLERK','MONORANJAN MODI',306);

INSERT INTO EMPLOYEES VALUES(30603,45000,'JR LIBRARIAN','RAJIV DEY',306);

Script Output × Query Result ×

SQL | All Rows Fetched: 16 in 0.011 seconds

	EMP_ID	SALARY	DES	EMP_NAME	BRANCH_NO
1	30101	56000	SR LIBRARIAN	ROHAN ANAND	301
2	30102	40000	DATABASE MANAGER	RITESH MISHRA	301
3	30103	300000	MANAGER	RITESH KHAN	301
4	30201	66000	SR LIBRARIAN	NURUL HAQUE	302
5	30202	26000	CLERK	ANANDA DEY	302
6	30203	76000	MANAGER	SWARUP SARKAR	302
7	30204	16000	GUARDSMAN	SUPRATIM MISHRA	302
8	30301	86000	MANAGER	SANJAY YADAV	303
9	30302	36000	SR LIBRARIAN	TITU BISOI	303
10	30401	96000	MANAGER	PRADEEP RAOUTH	304
11	30402	40000	DATABASE MANAGER	BITTU MISHRA	304
12	30501	100000	MANAGER	ANKIT ANAND	305
13	30601	200000	MANAGER	ROHAN BASU	306
14	30502	56000	COMPUTER TECH	MOHIBUL ISLAM	305
15	30602	40000	CLERK	MONORANJAN MODI	306
16	30603	45000	JR LIBRARIAN	RAJIV DEY	306

Insertion into ISSUECARD Table:

```
INSERT INTO ISSUECARD VALUES(6601,TO_DATE('17/12/2016',
'DD/MM/YYYY'),101,'IT',1230);

INSERT INTO ISSUECARD VALUES(6602,TO_DATE('12/01/2017',
'DD/MM/YYYY'),103,'MISERY',1233);

INSERT INTO ISSUECARD VALUES(6603,TO_DATE('11/02/2017',
'DD/MM/YYYY'),102,'HARRY POTTER',1231);

INSERT INTO ISSUECARD VALUES(6604,TO_DATE('13/03/2017',
'DD/MM/YYYY'),103,'MISERY',1239);

INSERT INTO ISSUECARD VALUES(6605,TO_DATE('21/03/2017',
'DD/MM/YYYY'),104,'THE SHINING',1240);

INSERT INTO ISSUECARD VALUES(6606,TO_DATE('20/04/2017',
'DD/MM/YYYY'),105,'SHERLOCK HOLMES',1241);

INSERT INTO ISSUECARD VALUES(6607,TO_DATE('19/05/2017',
'DD/MM/YYYY'),101,'IT',1232);

INSERT INTO ISSUECARD VALUES(6608,TO_DATE('18/06/2017',
'DD/MM/YYYY'),102,'HARRY POTTER',1232);

INSERT INTO ISSUECARD VALUES(6609,TO_DATE('19/01/2018',
'DD/MM/YYYY'),106,'WAR AND PEACE',1236);

INSERT INTO ISSUECARD VALUES(6610,TO_DATE('11/02/2018',
'DD/MM/YYYY'),107,'ROMEO AND JULIET',1237);

INSERT INTO ISSUECARD VALUES(6611,TO_DATE('03/03/2018',
'DD/MM/YYYY'),108,'THE GOOD BOATMAN',1238);
```

```
INSERT INTO ISSUECARD VALUES(6612,TO_DATE('06/03/2018',
'DD/MM/YYYY'),109,'TINTIN',1234);

INSERT INTO ISSUECARD VALUES(6613,TO_DATE('09/05/2018',
'DD/MM/YYYY'),110,'THE LORD OF THE RINGS',1235);

INSERT INTO ISSUECARD VALUES(6614,TO_DATE('10/07/2018',
'DD/MM/YYYY'),110,'THE LORD OF THE RINGS',1235);

INSERT INTO ISSUECARD VALUES(6615,TO_DATE('10/09/2018',
'DD/MM/YYYY'),109,'TINTIN',1230);

INSERT INTO ISSUECARD VALUES(6616,TO_DATE('11/01/2019',
'DD/MM/YYYY'),109,'TINTIN',1233);

INSERT INTO ISSUECARD VALUES(6617,TO_DATE('17/01/2019',
'DD/MM/YYYY'),107,'ROMEO AND JULIET',1237);
```

Script Output × Query Result ×

SQL | All Rows Fetched: 17 in 0.013 seconds

	ISSUE_ID	ISSUE_DATE	ISBN	ISSUE_BOOK_NAME	CUSTOMER_ID
1	6601	17-12-16	101	IT	1230
2	6602	12-01-17	103	MISERY	1233
3	6603	11-02-17	102	HARRY POTTER	1231
4	6604	13-03-17	103	MISERY	1239
5	6605	21-03-17	104	THE SHINING	1240
6	6606	20-04-17	105	SHERLOCK HOLMES	1241
7	6607	19-05-17	101	IT	1232
8	6608	18-06-17	102	HARRY POTTER	1232
9	6609	19-01-18	106	WAR AND PEACE	1236
10	6610	11-02-18	107	ROMEO AND JULIET	1237
11	6611	03-03-18	108	THE GOOD BOATMAN	1238
12	6612	06-03-18	109	TINTIN	1234
13	6613	09-05-18	110	THE LORD OF THE RINGS	1235
14	6614	10-07-18	110	THE LORD OF THE RINGS	1235
15	6615	10-09-18	109	TINTIN	1230
16	6616	11-01-19	109	TINTIN	1233
17	6617	17-01-19	107	ROMEO AND JULIET	1237

Insertion into RETURNCARD Table:

```
INSERT INTO RETURNCARD VALUES(7701,TO_DATE('23/12/2016',
'DD/MM/YYYY'),101,'IT',1230);

INSERT INTO RETURNCARD VALUES(7702,TO_DATE('19/01/2017',
'DD/MM/YYYY'),103,'MISERY',1233);

INSERT INTO RETURNCARD VALUES(7703,TO_DATE('20/02/2017',
'DD/MM/YYYY'),102,'HARRY POTTER',1231);

INSERT INTO RETURNCARD VALUES(7704,TO_DATE('19/03/2017',
'DD/MM/YYYY'),103,'MISERY',1239);

INSERT INTO RETURNCARD VALUES(7705,TO_DATE('28/03/2017',
'DD/MM/YYYY'),104,'THE SHINING',1240);

INSERT INTO RETURNCARD VALUES(7706,TO_DATE('29/04/2017',
'DD/MM/YYYY'),105,'SHERLOCK HOLMES',1241);

INSERT INTO RETURNCARD VALUES(7707,TO_DATE('29/05/2017',
'DD/MM/YYYY'),101,'IT',1232);

INSERT INTO RETURNCARD VALUES(7708,TO_DATE('26/06/2017',
'DD/MM/YYYY'),102,'HARRY POTTER',1232);

INSERT INTO RETURNCARD VALUES(7709,TO_DATE('27/01/2018',
'DD/MM/YYYY'),106,'WAR AND PEACE',1236);

INSERT INTO RETURNCARD VALUES(7710,TO_DATE('28/02/2018',
'DD/MM/YYYY'),107,'ROMEO AND JULIET',1237);

INSERT INTO RETURNCARD VALUES(7711,TO_DATE('15/03/2018',
'DD/MM/YYYY'),108,'THE GOOD BOATMAN',1238);
```

```
INSERT INTO RETURNCARD VALUES(7712,TO_DATE('21/03/2018',
'DD/MM/YYYY'),109,'TINTIN',1234);

INSERT INTO RETURNCARD VALUES(7713,TO_DATE('19/05/2018',
'DD/MM/YYYY'),110,'THE LORD OF THE RINGS',1235);

INSERT INTO RETURNCARD VALUES(7714,TO_DATE('20/07/2018',
'DD/MM/YYYY'),110,'THE LORD OF THE RINGS',1235);

INSERT INTO RETURNCARD VALUES(7715,TO_DATE('25/09/2018',
'DD/MM/YYYY'),109,'TINTIN',1230);

INSERT INTO RETURNCARD VALUES(7716,TO_DATE('25/01/2019',
'DD/MM/YYYY'),109,'TINTIN',1233);

INSERT INTO RETURNCARD VALUES(7717,TO_DATE('31/01/2019',
'DD/MM/YYYY'),107,'ROMEO AND JULIET',1237);
```

Script Output × Query Result ×

SQL | All Rows Fetched: 17 in 0.014 seconds

	RETURN_ID	RETURN_DATE	ISBN	RETURN_BOOK_NAME	CUSTOMER_ID
1	7701	23-12-16	101	IT	1230
2	7702	19-01-17	103	MISERY	1233
3	7703	20-02-17	102	HARRY POTTER	1231
4	7704	19-03-17	103	MISERY	1239
5	7705	28-03-17	104	THE SHINING	1240
6	7706	29-04-17	105	SHERLOCK HOLMES	1241
7	7707	29-05-17	101	IT	1232
8	7708	26-06-17	102	HARRY POTTER	1232
9	7709	27-01-18	106	WAR AND PEACE	1236
10	7710	28-02-18	107	ROMEO AND JULIET	1237
11	7711	15-03-18	108	THE GOOD BOATMAN	1238
12	7712	21-03-18	109	TINTIN	1234
13	7713	19-05-18	110	THE LORD OF THE RINGS	1235
14	7714	20-07-18	110	THE LORD OF THE RINGS	1235
15	7715	25-09-18	109	TINTIN	1230
16	7716	25-01-19	109	TINTIN	1233
17	7717	31-01-19	107	ROMEO AND JULIET	1237

Queries:

Q1>Display the names of books which belong in fantasy genre and price above 1000?

QUERY=>

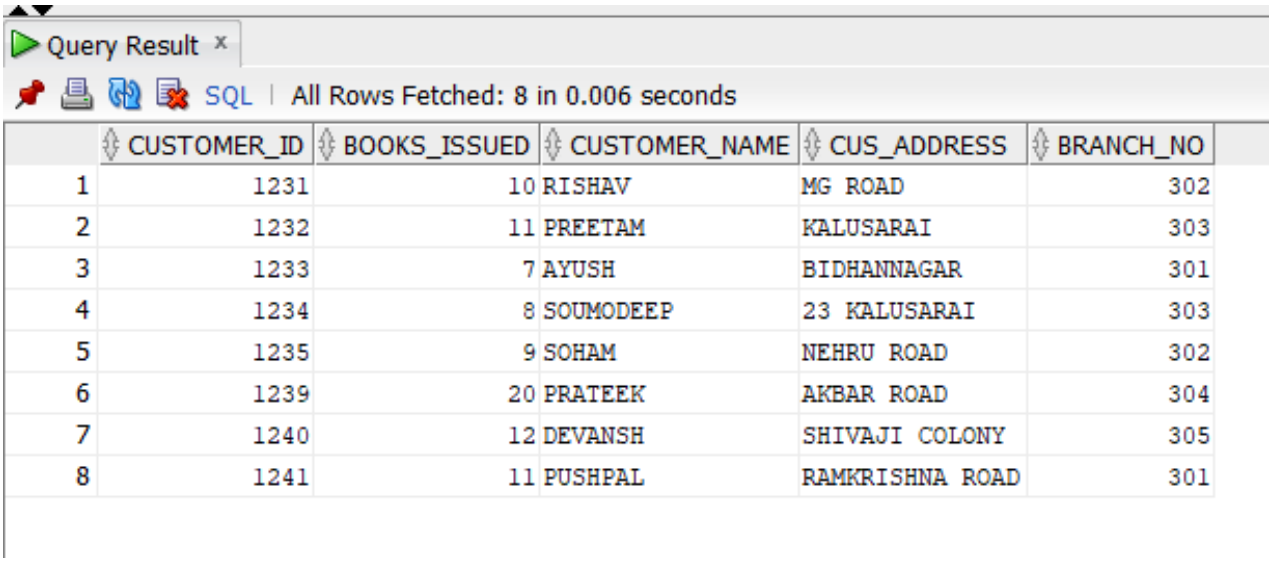
```
SELECT ISBN , TITLE
FROM BOOKS
WHERE GENRE='FANTASY' AND PRICE>=1000;
```

	ISBN	TITLE
1	102	HARRY POTTER

Q2>Display the details of customers who have read more than 5 books?

QUERY=>

```
SELECT* FROM CUSTOMER
WHERE BOOKS_ISSUED>5;
```

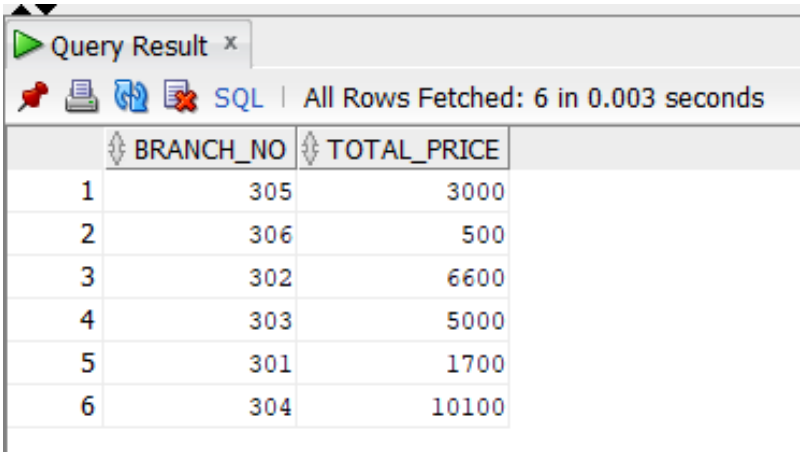


	CUSTOMER_ID	BOOKS_ISSUED	CUSTOMER_NAME	CUS_ADDRESS	BRANCH_NO
1	1231	10	RISHAV	MG ROAD	302
2	1232	11	PREETAM	KALUSARAI	303
3	1233	7	AYUSH	BIDHANNAGAR	301
4	1234	8	SOUMODEEP	23 KALUSARAI	303
5	1235	9	SOHAM	NEHRU ROAD	302
6	1239	20	PRATEEK	AKBAR ROAD	304
7	1240	12	DEVANSH	SHIVAJI COLONY	305
8	1241	11	PUSHPAL	RAMKRISHNA ROAD	301

Q3>Display the total price of books per branch?

QUERY=>

```
SELECT BOOKS.BRANCH_NO,SUM(PRICE) AS
                    TOTAL_PRICE
FROM BOOKS INNER JOIN BRANCH ON
BOOKS.BRANCH_NO=BRANCH.BRANCH_NO GROUP BY
BOOKS.BRANCH_NO ;
```


Query Result

SQL | All Rows Fetched: 6 in 0.003 seconds

	BRANCH_NO	TOTAL_PRICE
1	305	3000
2	306	500
3	302	6600
4	303	5000
5	301	1700
6	304	10100

Q4>Display the employee details along with which bank they work in ?

QUERY=>

```
SELECT EMP_ID,SALARY,DES,EMP_NAME,

BRANCH.BRANCH_NO, MANAGER_ID, B_ADDRESS

FROM EMPLOYEES INNER JOIN BRANCH ON
EMPLOYEES.BRANCH_NO=BRANCH.BRANCH_NO;
```

Query Result

SQL | All Rows Fetched: 16 in 0.008 seconds

	EMP_ID	SALARY	DES	EMP_NAME	BRANCH_NO	MANAGER_ID	B_ADDRESS
1	30101	56000	SR LIBRARIAN	ROHAN ANAND	301	900	ABC ROAD DELHI
2	30102	40000	DATABASE MANAGER	RITESH MISHRA	301	900	ABC ROAD DELHI
3	30103	300000	MANAGER	RITESH KHAN	301	900	ABC ROAD DELHI
4	30201	66000	SR LIBRARIAN	NURUL HAQUE	302	901	MG ROAD
5	30202	26000	CLERK	ANANDA DEY	302	901	MG ROAD
6	30203	76000	MANAGER	SWARUP SARKAR	302	901	MG ROAD
7	30204	16000	GUARDSMAN	SUPRATIM MISHRA	302	901	MG ROAD
8	30301	86000	MANAGER	SANJAY YADAV	303	902	KALUSARAI
9	30302	36000	SR LIBRARIAN	TITU BISOI	303	902	KALUSARAI
10	30401	96000	MANAGER	PRADEEP RAOUTH	304	903	PRESS COLONY
11	30402	40000	DATABASE MANAGER	BITTU MISHRA	304	903	PRESS COLONY
12	30501	100000	MANAGER	ANKIT ANAND	305	904	XYZ LANE
13	30601	200000	MANAGER	ROHAN BASU	306	905	SALT LAKE
14	30502	56000	COMPUTER TECH	MOHIBUL ISLAM	305	904	XYZ LANE
15	30602	40000	CLERK	MONORANJAN MODI	306	905	SALT LAKE
16	30603	45000	JR LIBRARIAN	RAJIV DEY	306	905	SALT LAKE

Q5>Display the books issued more than once?

QUERY=>

```
SELECT BOOKS.ISBN,COUNT(BOOKS.ISBN) AS TOTAL_BOOKS_ISSUED
FROM BOOKSINNER JOIN ISSUECARD ON BOOKS.ISBN=ISSUECARD.ISBN GROUP BY BOOKS.ISBN HAVING COUNT(BOOKS.ISBN)>1;
```

Query Result

SQL | All Rows Fetched: 6 in 0.005 seconds

	ISBN	TOTAL_BOOKS_ISSUED
1	107	2
2	109	3
3	110	2
4	101	2
5	103	2
6	102	2

-----THE END-----