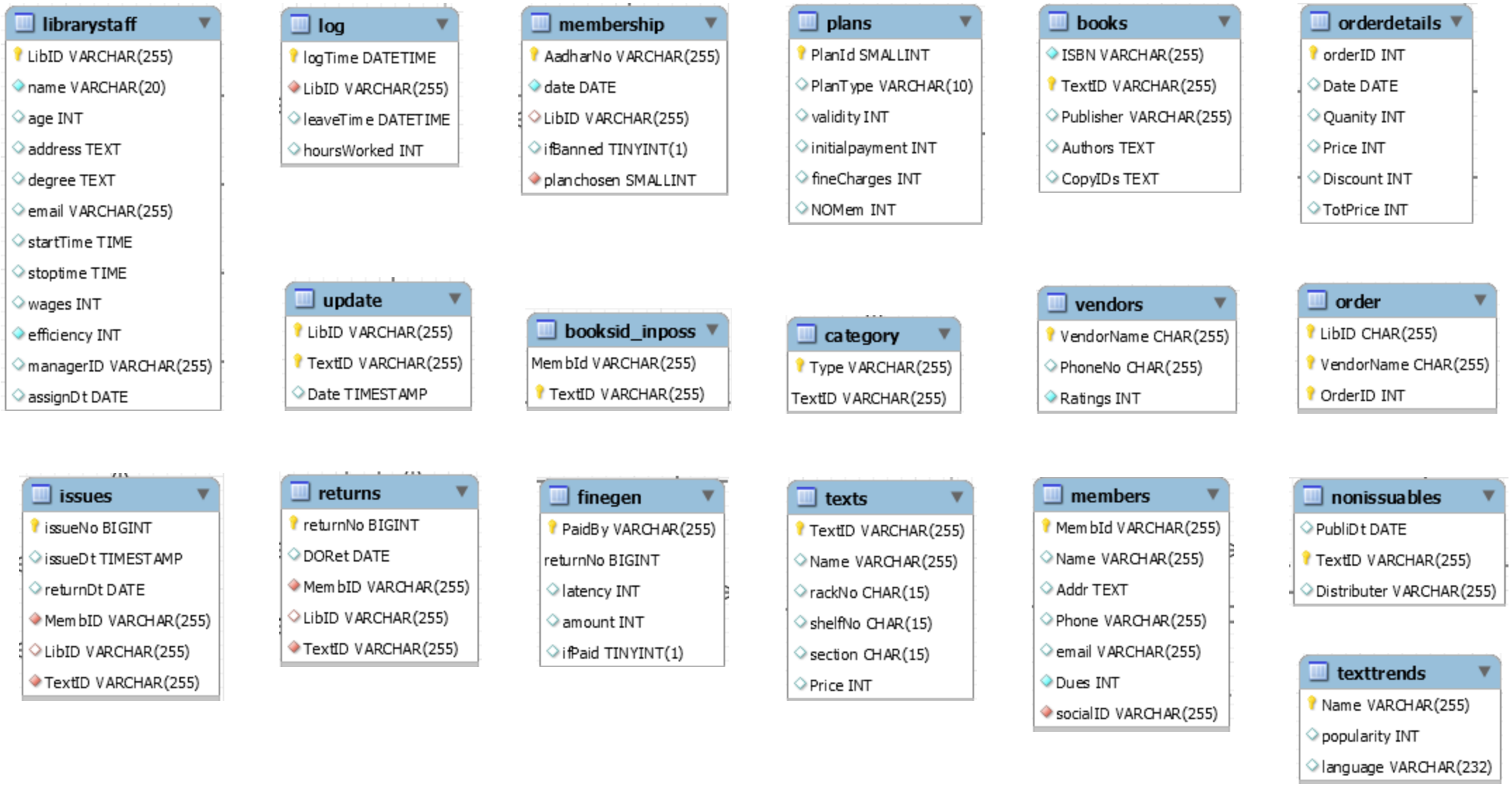
SAIRAM

Presenting My Database For

- - -- Library Management Systems-- - -

Relational Database Schemas :



Populated database

librarystaff

LibID	name	age	address	degree	email	startTime	stoptime	wages	efficiency	managerID	assignDt
booker12	Rachel Booker	25	wall street	M.Sc	rachel@bigli...	09:00:00	12:30:00	25000	5	booker12	2008-10-29
grey07	Laura Grey	21	AB Lane	NULL	laura@biglib...	07:30:00	09:30:00	10000	2	booker12	2008-10-30
guppi10	Tom Guppi	20	six cross avenue	NULL	tommy@bigli...	20:00:00	22:00:00	7000	1	Jenkins46	2011-06-02
harry6	Harry Parker	20	tesla complex	NULL	parker@bigli...	18:00:00	19:00:00	6000	1	Jenkins46	2011-01-16
jack759	Jack Sparrow	19	bell street	NULL	jsp@biglib.com	17:00:00	18:00:00	6000	0	Jenkins46	2011-01-16
Jenkins46	Mary Jenkins	24	Park avenue	B.Sc	jenkins@bigli...	18:00:00	20:00:00	25500	5	Jenkins46	2008-10-30
john99	John Hopkins	22	white avenue	NULL	hops@biglib....	15:00:00	16:00:00	6000	0	booker12	2010-01-02
Johnson81	Craig Johnson	19	esplanade	NULL	craig@biglib....	12:00:00	15:00:00	12000	3	booker12	2008-11-05
oscar20	Oscar Wilde	20	square road	NULL	wil@biglib.com	19:00:00	20:00:00	6000	1	Jenkins46	2011-05-25
smith79	Jamie Smith	17	baker street	NULL	jamie@biglib...	19:30:00	22:00:00	11900	4	Jenkins46	2008-11-01
william87	Black William	15	sarat lane	10+	black@biglib...	16:00:00	17:00:00	6000	0	Jenkins46	2010-05-15

booksid_inposs

MembId	TextID
azhar6399	b602
chitra6358	b603
jawahar3216	b604
kiran3026	b605
mukti6589	b606
jawahar3216	b607
azhar6399	b608
jawahar3216	b609
surya3657	b610
varun4689	b611

membership

AadharNo	date	LibID	ifBanned	planchosen
1102 3526 4789	2010-05-02	booker12	NULL	1102
1235 8457 3669	2009-05-25	Johnson81	NULL	1103
1552 4586 3265	2009-02-19	grey07	NULL	1102
2555 8754 9653	2008-11-20	booker12	NULL	1105
3665 4887 5998	2010-07-13	grey07	NULL	1102
4557 2336 9445	2008-11-25	Jenkins46	NULL	1103
4578 3215 6694	2009-11-20	grey07	NULL	1105
7754 8552 6334	2008-11-20	booker12	NULL	1101
8511 2005 9860	2010-07-15	Jenkins46	NULL	1104
9456 6621 7432	2008-12-06	booker12	NULL	1106

members

MembId	Name	Addr	Phone	email	Dues	socialID
azhar6399	Jayshree Azhar Nadig	49, Sa...	003 04989...	jayanag9@g...	0	4578 3215 6694
chitra6358	Chitra Peri	65, Him...	0280 0861...	NULL	0	4557 2336 9445
jawahar3216	Jawahar Kumar Bhar...	10, Rad...	+91 376 3...	kumarj8@gma...	0	2555 8754 9653
kiran3026	Kiran Majumdar	82, Bha...	029 49059...	kiranm@hotm...	16	8511 2005 9860
mukti6589	Mukti Mistry	53, Rup...	+91 447 7...	mm45@gmail....	0	1552 4586 3265
nair9870	Harbhajan Nair	79, Go...	+91 343 2...	vaiguru11@g...	23	9456 6621 7432
namita5687	Namita Mustafa Din	69, Nas...	+91 75 50...	mustafanam...	0	1235 8457 3669
sapna2007	Sapna Kumer	88, Din...	021 07934...	NULL	6	7754 8552 6334
surya3657	Surya Ram Saha	71, Kus...	+91 58 29...	ramsurya8@y...	0	3665 4887 5998
varun4689	Varun Bhai Rao	11, Ma...	+91 115 9...	varun4@gmail...	136	1102 3526 4789

texts

TextID	Name	rackNo	shelfNo	section	Price
A16	First Principles: Elon Musk on the Power of Thinking for Yourself	2	alpha	A-W	105
A17	Entropy:Why Life Always Seems To Get Complicated	9	delta	A-X	98
A18	The Paradox of Behavior Change	1	beta	A-W	57
A19	Inside the Mind of a Mad Scientist	4	beta	A-Y	79
A20	The Myth of Creative Inspiration	6	gamma	A-X	48
b602	The Hunger Games	4	alpha	N-C	759
b603	Harry Potter and the Sorcerer's Stone	5	alpha	N-C	699
b604	Twilight	5	alpha	N-C	399
b605	To Kill a Mockingbird	5	gamma	N-C	675
b606	The Great Gatsby	4	gamma	N-C	435
b607	The Fault in Our Stars	6	beta	N-C	624
b608	The Hobbit	4	alpha	N-C	458
b609	The Catcher in the Rye	5	beta	N-C	354
b610	Angels & Demons	6	beta	N-C	819
b611	Pride and Prejudice	4	gamma	N-C	350
M104	Forbes	5	gamma	M-A	295
M203	Business today	6	delta	M-A	109
M305	India Today	8	alpha	M-A	356
M405	Digit	3	gamma	M-C	409
M509	Sportstar	4	delta	M-S	209

category

Type	TextID
article	A16
inspirational	A16
article	A17
philosophy	A17
article	A18
pshycology	A18
article	A19
science	A19
article	A20
creative	A20
action	b602
drama	b602
novel	b602
science fict...	b602
fantasy	b603
novel	b603
comedy	b604
fantasy	b604
horror	b604
novel	b604
novel	b604
action	b605
drama	b602
novel	b602
science fict...	b602
fantasy	b603
novel	b603
comedy	b604
fantasy	b604
horror	b604
novel	b604
novel	b605
gothic	b605
novel	b605
novel	b606
tragedy	b606
novel	b607
realistic fict...	b607
fantasy	b608
novel	b608
novel	b609
realistic fict...	b609
mystery	b610
novel	b610
thriller fiction	b610
novel	b611
romance	b611
business	M104
magazine	M104
politics	M104
business	M203
magazine	M305
news	M305
magazine	M405
technology	M405
magazine	M509
sports	M509

books

ISBN	TextID	Publisher	Authors	CopyIDs
439023483	b602	Penguin Random House	Suzanne Collins	0
439554934	b603	HarperCollins	J.K. Rowling, ...	0
316015849	b604	Macmillan Publishers	Stephenie Me...	0
61120081	b605	Simon & Schuster	Harper Lee	0
743273567	b606	O'Reilly	F. Scott Fitzg...	1
525478817	b607	Rupa	John Green	0
618260307	b608	Wiley	J.R.R. Tolkien	0
316769177	b609	Orient Blackswan	J.D. Salinger	2
1416524797	b610	Wiley	Dan Brown	2
679783261	b611	Rupa	Jane Austen	0

nonissuables

PubliDt	TextID	Distributer
2017-11-13	A16	McGraw-Hill Education
2017-05-05	A17	Pearson
2017-02-06	A18	Scholastic
2015-05-05	A19	Cengage
2014-02-27	A20	Klett
2011-02-28	M104	NULL
2012-08-16	M203	NULL
2011-06-15	M305	NULL
2010-10-10	M405	NULL
2013-12-25	M509	NULL

issues

issueNo	issueDt	returnDt	MembID	LibID	TextID
1195	2020-04-15 0...	2020-05-22	varun4689	grey07	b602
1196	2020-04-14 0...	2020-05-21	surya3657	booker12	b603
1197	2020-04-16 1...	2020-05-23	mukti6589	Johnson81	b604
1198	2020-04-15 1...	2020-05-22	kiran3026	john99	b605
1199	2020-04-13 1...	2020-05-20	jawahar3...	william87	b606
1200	2020-04-14 1...	2020-05-21	sapna2007	jack759	b607
1201	2020-04-14 1...	2020-05-21	azhar6399	Jenkins46	b608
1202	2020-04-13 1...	2020-05-20	namita5687	harry6	b609
1203	2020-04-12 1...	2020-05-19	chitra6358	oscar20	b610
1204	2020-04-14 1...	2020-05-21	nair9870	smith79	b611
1205	2020-05-05 0...	2020-05-12	azhar6399	grey07	b602
1206	2020-05-05 0...	2020-05-12	chitra6358	booker12	b603
1207	2020-05-05 1...	2020-05-12	jawahar3...	Johnson81	b604
1208	2020-05-05 1...	2020-05-12	kiran3026	john99	b605
1209	2020-05-05 1...	2020-05-12	mukti6589	william87	b606
1210	2020-05-05 1...	2020-05-12	jawahar3...	jack759	b607
1211	2020-05-05 1...	2020-05-12	azhar6399	Jenkins46	b608
1212	2020-05-05 1...	2020-05-12	surya3657	oscar20	b610
1213	2020-05-05 1...	2020-05-12	varun4689	smith79	b611

textsTrends

Name	popularity	language
Angels & Demons	8	eng-CA
Business today	7	eng
Digit	9	eng
Entropy:Why Life Always Seems To Get Complic...	6	eng
First Principles: Elon Musk on the Power of Think...	8	eng
Forbes	8	eng
Harry Potter and the Sorcerer's Stone	8	eng-US
India Today	6	eng
Inside the Mind of a Mad Scientist	7	eng
Pride and Prejudice	5	eng
Sportstar	9	eng
The Catcher in the Rye	7	eng
The Fault in Our Stars	9	eng
The Great Gatsby	4	eng
The Hobbit	9	eng-US
The Hunger Games	6	eng
The Myth of Creative Inspiration	2	eng
The Paradox of Behavior Change	5	eng
To Kill a Mockingbird	8	eng
Twilight	8	eng

returns

returnNo	DORet	MembID	LibID	TextID
10195	2020-05-22	varun4689	grey07	b602
10196	2020-05-24	surya3657	booker12	b603
10197	2020-05-25	mukti6589	Johnson81	b604
10198	2020-05-22	kiran3026	john99	b605
10199	2020-05-21	jawahar3216	william87	b606
10200	2020-05-21	sapna2007	jack759	b607
10201	2020-05-25	azhar6399	Jenkins46	b608
10202	2020-05-25	namita5687	harry6	b609
10203	2020-05-19	chitra6358	oscar20	b610
10204	2020-05-27	nair9870	smith79	b611

plans

PlanId	PlanType	validity	initialpayment	fineCharges	NOMem
1100	temp	0	200	100	NULL
1101	basic	1	100	10	NULL
1102	bronze	3	110	7	NULL
1103	silver	4	130	5	NULL
1104	gold	5	150	3	NULL
1105	platinum	7	180	2	NULL
1106	diamond	10	200	1	NULL

vendors

VendorName	PhoneNo	Ratings
Ananda Publishers	033 2241 9672	4
Bablu Book Stall	098741 22867	6
Genius Book Centre	089613 33111	7
India Book Distributors	033 2257 0466	5
Mohan Book Suppliers	092316 11529	6
Nandan Store	094322 10127	8
Rama Book Stores	NULL	0
Standard Book Depot	099031 48363	9
Vikas Book Store	098307 13767	3
Yavanshi Book Shop	033 2641 4114	4

order

LibID	VendorName	OrderID
booker12	Standard Book Depot	2337
grey07	Genius Book Centre	2338
harry6	Vikas Book Store	2339
jack759	Nandan Store	2340
Jenkins46	Standard Book Depot	2341
john99	Ananda Publishers	2342
Johnson81	Yavanshi Book Shop	2343
oscar20	Yavanshi Book Shop	2344
smith79	Genius Book Centre	2345
william87	Nandan Store	2336
william87	Nandan Store	2346

orderdetails

orderID	Date	Quanity	Price	Discount	TotPrice
2336	2017-05-08	6	536	3	3120
2337	2017-05-09	8	350	8	2716
2338	2017-05-18	2	200	10	388
2339	2017-05-17	3	356	5	1036
2340	2017-05-17	4	158	6	613
2341	2017-05-17	1	965	3	936
2342	2017-05-18	2	1003	8	1946
2343	2017-05-18	6	365	9	2124
2344	2017-05-20	5	521	4	2527
2345	2017-05-25	6	348	6	2025
2346	2017-05-25	1	562	7	545

update

LibID	TextID	Date
grey07	A17	2008-10-30 00:00:00
grey07	b609	2008-10-30 00:00:00
harry6	b605	2011-01-16 00:00:00
jack759	M405	2011-01-16 00:00:00
Jenkin...	b606	2008-10-30 00:00:00
john99	b605	2010-01-02 00:00:00
Johnso...	A16	2008-11-05 00:00:00
Johnso...	b608	2008-11-05 00:00:00
oscar20	b611	2011-05-25 00:00:00
oscar20	M104	2011-05-25 00:00:00
oscar20	M509	2011-05-25 00:00:00
smith79	b610	2008-11-01 00:00:00
william87	A20	2010-05-15 00:00:00

log

logTime	LibID	leaveTime	hoursWorked
2020-05-05 07:39:05	grey07	2020-05-05 09:28:48	1
2020-05-05 09:06:00	booker12	2020-05-05 12:20:35	3
2020-05-05 12:45:24	Johnson81	2020-05-05 15:36:17	2
2020-05-05 15:32:24	john99	2020-05-05 16:18:34	0
2020-05-05 16:20:03	william87	2020-05-05 17:05:07	0
2020-05-05 17:55:08	jack759	2020-05-05 18:30:16	0
2020-05-05 18:11:36	Jenkins46	2020-05-05 20:36:16	2
2020-05-05 18:15:28	harry6	2020-05-05 19:10:15	0
2020-05-05 19:08:59	oscar20	2020-05-05 20:35:48	1
2020-05-05 19:33:52	smith79	2020-05-05 22:12:57	2
2020-05-05 20:05:00	guppi10	2020-05-05 22:03:45	1

finegen

PaidBy	returnNo	latency	amount	ifPaid
azhar6399	10201	4	8	1
chitra6358	10203	0	0	1
jawahar3216	10199	1	2	1
kiran3026	10198	0	0	1
mukti6589	10197	2	14	1
nair9870	10204	6	6	1
namita5687	10202	5	25	1
sapna2007	10200	0	0	1
surya3657	10196	3	21	1
varun4689	10195	0	0	1

Querying my Database....

Query 1 : Retrieving details of the members.
Using : SELECT and *.

```
6 •   select * from members;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Ce

MembId	Name	Addr	Phone	email	Dues	socialID
azhar6399	Jayshree Azhar Nadig	49, Sa...	003 04989...	jayanag9@g...	0	4578 3215 6694
chitra6358	Chitra Peri	65, Him...	0280 0861...	NULL	0	4557 2336 9445
jawahar3216	Jawahar Kumar Bhar...	10, Rad...	+91 376 3...	kumarj8@gma...	0	2555 8754 9653
kiran3026	Kiran Majumdar	82, Bha...	029 49059...	kiranm@hotm...	16	8511 2005 9860
mukti6589	Mukti Mistry	53, Rup...	+91 447 7...	mm45@gmail....	0	1552 4586 3265
nair9870	Harbhajan Nair	79, Go...	+91 343 2...	vaiguru11@g...	23	9456 6621 7432
namita5687	Namita Mustafa Din	69, Nas...	+91 75 50...	mustafanam...	0	1235 8457 3669
sapna2007	Sapna Kumer	88, Din...	021 07934...	NULL	6	7754 8552 6334
surya3657	Surya Ram Saha	71, Kus...	+91 58 29...	ramsurya8@y...	0	3665 4887 5998
varun4689	Varun Bhai Rao	11, Ma...	+91 115 9...	varun4@gmail...	136	1102 3526 4789

Query 2 : Retrieving details of Kiran.
Using : SELECT-FROM-WHERE clause

```
6 •    select * from members where Name="Kiran Majumdar";
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Conter

MembId	Name	Addr	Phone	email	Dues	socialID
kiran3026	Kiran Majumdar	82, Bha...	029 49059...	kiranm@hotm...	16	8511 2005 9860

Query 3 : Displaying name and phone no. of member who cannot be emailed.

Using : Project-SELECT and IS operator.

```
6 •    select Name,Phone from members where email is NULL;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Cont

Name	Phone
Chitra Peri	0280 0861...
Sapna Kumer	021 07934...

Query 4 : Displaying names and Phone No.s who cannot be email and has dues.
Using : AND operator.

```
6 •    select Name,Phone from members
7      where email is NULL and Dues>0;
```

Result Grid | Filter Rows:

	Name	Phone
▶	Sapna Kumer	021 07934...

Query 5 : Displaying names of members, their chosen plan, and staff who did their registration.

Using : SELECT-PROJECT-JOIN.

```
5 •   select Name,planchosen,LibID
6     from members,membership
7     where socialID=AadharNo;
```

Result Grid | Filter Rows:

Name	planchosen	LibID
Jayshree Azhar Nadig	1105	grey07
Chitra Peri	1103	Jenkins46
Jawahar Kumar Bhar…	1105	booker12
Kiran Majumdar	1104	Jenkins46
Mukti Mistry	1102	grey07
Harbhajan Nair	1106	booker12
Namita Mustafa Din	1103	Johnson81
Sapna Kumer	1101	booker12
Surya Ram Saha	1102	grey07
Varun Bhai Rao	1102	booker12

Query 6 : Displaying supervisors and their respective subordinates.
Using : Aliases by AS keyword.

```
5 •   select Super.name AS supervisor,Employee.name AS subordinate
6     from  librarystaff AS Super,librarystaff AS Employee
7     where Super.LibID=Employee.managerID;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

supervisor	subordinate
Rachel Booker	Rachel Booker
Rachel Booker	Laura Grey
Mary Jenkins	Tom Guppi
Mary Jenkins	Harry Parker
Mary Jenkins	Jack Sparrow
Mary Jenkins	Mary Jenkins
Rachel Booker	John Hopkins
Rachel Booker	Craig Johnson
Mary Jenkins	Oscar Wilde
Mary Jenkins	Jamie Smith
Mary Jenkins	Black William

Query 7 : Categorizing salaries of library staff.
Using : DISTINCT keyword.

```
5 •   select DISTINCT wages from librarystaff;
```

Result Grid | Filter Rows: | Export:

wages
25000
10000
7000
6000
25500
12000
11900

Query 8 : Displaying all issue and return Transaction details of our library.
Using : UNION.

```
5 •   (select issueDt as transactionDate,LibID,MembID from issues)
6      UNION (select DoRet,LibID,MembID from returns);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

transactionDate	LibID	MembID
2020-04-15 07:39:48	grey07	varun4689
2020-04-14 09:06:47	booker12	surya3657
2020-04-16 12:45:35	Johnson81	mukti6589
2020-04-15 15:32:22	john99	kiran3026
2020-04-13 16:20:16	william87	jawahar3216
2020-04-14 17:55:33	jack759	sapna2007
2020-04-14 18:11:52	Jenkins46	azhar6399
2020-04-13 18:15:58	harry6	namita5687
2020-04-12 19:08:18	oscar20	chitra6358
2020-04-14 19:33:08	smith79	nair9870
2020-05-05 07:39:48	grey07	azhar6399
2020-05-05 09:06:47	booker12	chitra6358
2020-05-05 12:45:35	Johnson81	jawahar3216
2020-05-05 15:32:22	john99	kiran3026
2020-05-05 16:20:16	william87	mukti6589
2020-05-05 17:55:33	jack759	jawahar3216
2020-05-05 18:11:52	Jenkins46	azhar6399
2020-05-05 19:08:18	oscar20	surya3657
2020-05-05 19:33:08	smith79	varun4689
2020-05-22 00:00:00	grey07	varun4689
2020-05-24 00:00:00	booker12	surya3657
2020-05-25 00:00:00	Johnson81	mukti6589
2020-05-22 00:00:00	john99	kiran3026
2020-05-21 00:00:00	william87	jawahar3216
2020-05-21 00:00:00	jack759	sapna2007
2020-05-25 00:00:00	Jenkins46	azhar6399
2020-05-25 00:00:00	harry6	namita5687
2020-05-19 00:00:00	oscar20	chitra6358
2020-05-27 00:00:00	smith79	nair9870

Query 9 : Displaying books from action category.
Using : IN operator, a Nested Query(Uncorrelated).

```
5 •   select Name from texts
6     where TextID in
7     (select TextId from category where Type= "action");
```

Result Grid | Filter Rows: | Export: | Wrap Cell Cont

Name
The Hunger Games
To Kill a Mockingbird

Query 10 : Displaying the names of the staff whose salary is less than a staff of same efficiency.

Using : Correlated Nested Query.

```
5 •   select name, wages from librarystaff as M
6     where wages<
7     (select max(wages) from librarystaff where efficiency=M.efficiency);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	wages
Rachel Booker	25000
Harry Parker	6000
Oscar Wilde	6000

Query 11 : Displaying names of the staff who was able to registered member for a costly membership and along with the date.

Using : EXISTS.

```
5 •    select date,LibId from membership
6      where EXISTS
7      (select * from plans where PlanId=planchosen and validity>3);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	date	LibId
▶	2009-05-25	Johnson81
	2008-11-25	Jenkins46
	2010-07-15	Jenkins46
	2008-11-20	booker12
	2009-11-20	grey07
	2008-12-06	booker12

Query 12 : Displaying names of the Text with average Popularity.
Using : IN.

```
5 •    select Name from texttrends
6      where popularity IN (4,5,6);
```

Result Grid | Filter Rows:

Name
Entropy:Why Life Always Seems To Get Complic...
India Today
Pride and Prejudice
The Great Gatsby
The Hunger Games
The Paradox of Behavior Change

Query 13 : Displaying names of Text and its categories.
Using : JOIN.

```
5 •  select Name,Type from texts
6    JOIN category on category.TextID=texts.TextID;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content

Name	Type
Angels & Demons	mystery
Angels & Demons	novel
Angels & Demons	thriller fiction
Business today	business
Digit	magazine
Digit	technology
Entropy:Why Life Always Seems To Get Complicated	article
Entropy:Why Life Always Seems To Get Complicated	philosophy
First Principles: Elon Musk on the Power of Thinking for Yourself	article
First Principles: Elon Musk on the Power of Thinking for Yourself	inspirational
Forbes	business
Forbes	magazine
Forbes	politics
Harry Potter and the Sorcerer's Stone	fantasy
Harry Potter and the Sorcerer's Stone	novel
India Today	magazine
India Today	news
Inside the Mind of a Mad Scientist	article
Inside the Mind of a Mad Scientist	science
Pride and Prejudice	novel
Pride and Prejudice	romance
Sportstar	magazine
Sportstar	sports
The Catcher in the Rye	novel
The Catcher in the Rye	realistic fiction
The Fault in Our Stars	novel
The Fault in Our Stars	realistic fiction
The Great Gatsby	novel
The Great Gatsby	tragedy
The Hobbit	fantasy
The Hobbit	novel
The Hunger Games	action
The Hunger Games	drama
The Hunger Games	novel
The Hunger Games	science fiction
The Myth of Creative Inspiration	article
The Myth of Creative Inspiration	creative
The Paradox of Behavior Change	article
The Paradox of Behavior Change	pshycology
To Kill a Mockingbird	action
To Kill a Mockingbird	gothic
To Kill a Mockingbird	novel
Twilight	comedy
Twilight	fantasy
Twilight	horror
Twilight	novel

Query 14 : Displaying Members and their Plan Type.
Using : multiple JOIN.

```
5 •   select Name,PlanType from
6     (members JOIN membership on socialID=AadharNo)
7     JOIN plans on planchosen=PlanID;
```

Result Grid | Filter Rows: | Export: | Wrap

Name	PlanType
Sapna Kumer	basic
Varun Bhai Rao	bronze
Mukti Mistry	bronze
Surya Ram Saha	bronze
Namita Mustafa Din	silver
Chitra Peri	silver
Kiran Majumdar	gold
Jawahar Kumar Bhar…	platinum
Jayshree Azhar Nadig	platinum
Harbhajan Nair	diamond

Query 15 : Displaying Maximum, Minimum and Average salary of Library staffs.
Using : MAX, MIN, AVG function.

```
5 •   select MAX(wages), MIN(wages), AVG(wages)
6     from librarystaff;
```

Result Grid | Filter Rows: | Export:

	MAX(wages)	MIN(wages)	AVG(wages)
▶	25500	6000	11036.3636

Query 16 : Displaying maximum, minimum, average discount received while ordering more than 5 quantity.

Using : MAX, MIN, AVG function and WHERE clause.

```
5 •   select MAX(Discount), MIN(Discount), AVG(Discount)
6     from orderdetails
7     where Quanity>5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Co

	MAX(Discount)	MIN(Discount)	AVG(Discount)
▶	9	3	6.5000

Query 17 : Displaying Total no. of members in the Library
Using : COUNT function.

```
5 •    select COUNT(*) from members;
```

Result Grid | Filter Rows:

	COUNT(*)
▶	10

Query 18 : Finding no. of members registered for each plan.
Using : COUNT function and WHERE clause for join operation.

```
5 •   update plans
6     set NOMem = ( select COUNT(*) from membership where planchosen=planID);
7 •   select PlanID, PlanType, NOMem from plans;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

PlanID	PlanType	NOMem
1100	temp	0
1101	basic	1
1102	bronze	3
1103	silver	2
1104	gold	1
1105	platinum	2
1106	diamond	1

Query 19 : Categorizing staffs according to their Efficiency.
Using : GROUP BY.

```
5 •   select efficiency,count(*),avg(wages) from librarystaff
6     GROUP BY efficiency;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

efficiency	count(*)	avg(wages)
5	2	25250.0000
2	1	10000.0000
1	3	6333.3333
0	3	6000.0000
3	1	12000.0000
4	1	11900.0000

Query 20 : Counting Texts of each category.
Using : GROUP BY and join condition.

```
5 •  select Type,count(*) from Texts,category
6    where texts.TextID=category.TextID
7    GROUP BY Type;
```

Result Grid | Filter Rows: | Export:

Type	count(*)
mystery	1
novel	10
thriller fiction	1
business	2
magazine	4
technology	1
article	5
philosophy	1
inspirational	1
politics	1
fantasy	3
news	1
science	1
romance	1
sports	1
realistic fiction	2
tragedy	1
action	2
drama	1
science fiction	1
creative	1
pshycology	1
gothic	1
comedy	1
horror	1

Query 21 : Listing the Vendor Names who provided more than 10% discount till date.
Using : HAVING along with group by and join operation.

```
5 •   select VendorName,sum(Discount) from `order`, orderdetails
6     where `order`.OrderID=orderdetails.OrderID
7     GROUP BY VendorName
8     HAVING sum(Discount)>10;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

VendorName	sum(Discount)
Standard Book Depot	11
Genius Book Centre	16
Nandan Store	16
Yavanshi Book Shop	13

Query 22 : Listing IDs of all fiction type books.
Using : LIKE & % for string comparison.

```
5 •   select TextID, `Type` from category
6     where `Type` LIKE '%fiction%';
```

Result Grid | Filter Rows: | Edit:

TextID	Type
b602	science fiction
b607	realistic fiction
b609	realistic fiction
b610	thriller fiction

Query 23 : Listing Name and Location of Texts available in block M.
Using : LIKE & _ for string comparison.

```
5 •    select Name,rackNo,shelfNo,section from texts
6      where section LIKE 'M__';
```

Result Grid | Filter Rows: | Export: | Wrap

Name	rackNo	shelfNo	section
Forbes	5	gamma	M-A
Business today	6	delta	M-A
India Today	8	alpha	M-A
Digit	3	gamma	M-C
Sportstar	4	delta	M-S

Query 24 : Generate Discount Amount for all orders.
Using : Mathematical operators *,/.

```
5 •  select orderID, Quanity, Price, Discount, (Discount/100)*Quanity*Price
6    from orderdetails;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

orderID	Quanity	Price	Discount	(Discount/100)*Quanity*Price
2336	6	536	3	96.4800
2337	8	350	8	224.0000
2338	2	200	10	40.0000
2339	3	356	5	53.4000
2340	4	158	6	37.9200
2341	1	965	3	28.9500
2342	2	1003	8	160.4800
2343	6	365	9	197.1000
2344	5	521	4	104.2000
2345	6	348	6	125.2800
2346	1	562	7	39.3400

Query 25 : Arranging texts by popularity.
Using : ORDER BY & DESC.

```
5 •   select Name,popularity from texttrends
6     ORDER BY popularity DESC;
```

Result Grid | Filter Rows: | Edit:

Name	popularity
Digit	9
Sportstar	9
The Fault in Our Stars	9
The Hobbit	9
Angels & Demons	8
First Principles: Elon Musk on the Power of Think...	8
Forbes	8
Harry Potter and the Sorcerer's Stone	8
To Kill a Mockingbird	8
Twilight	8
Business today	7
Inside the Mind of a Mad Scientist	7
The Catcher in the Rye	7
Entropy:Why Life Always Seems To Get Complic...	6
India Today	6
The Hunger Games	6
Pride and Prejudice	5
The Paradox of Behavior Change	5
The Great Gatsby	4
The Myth of Creative Inspiration	2

Thank You

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