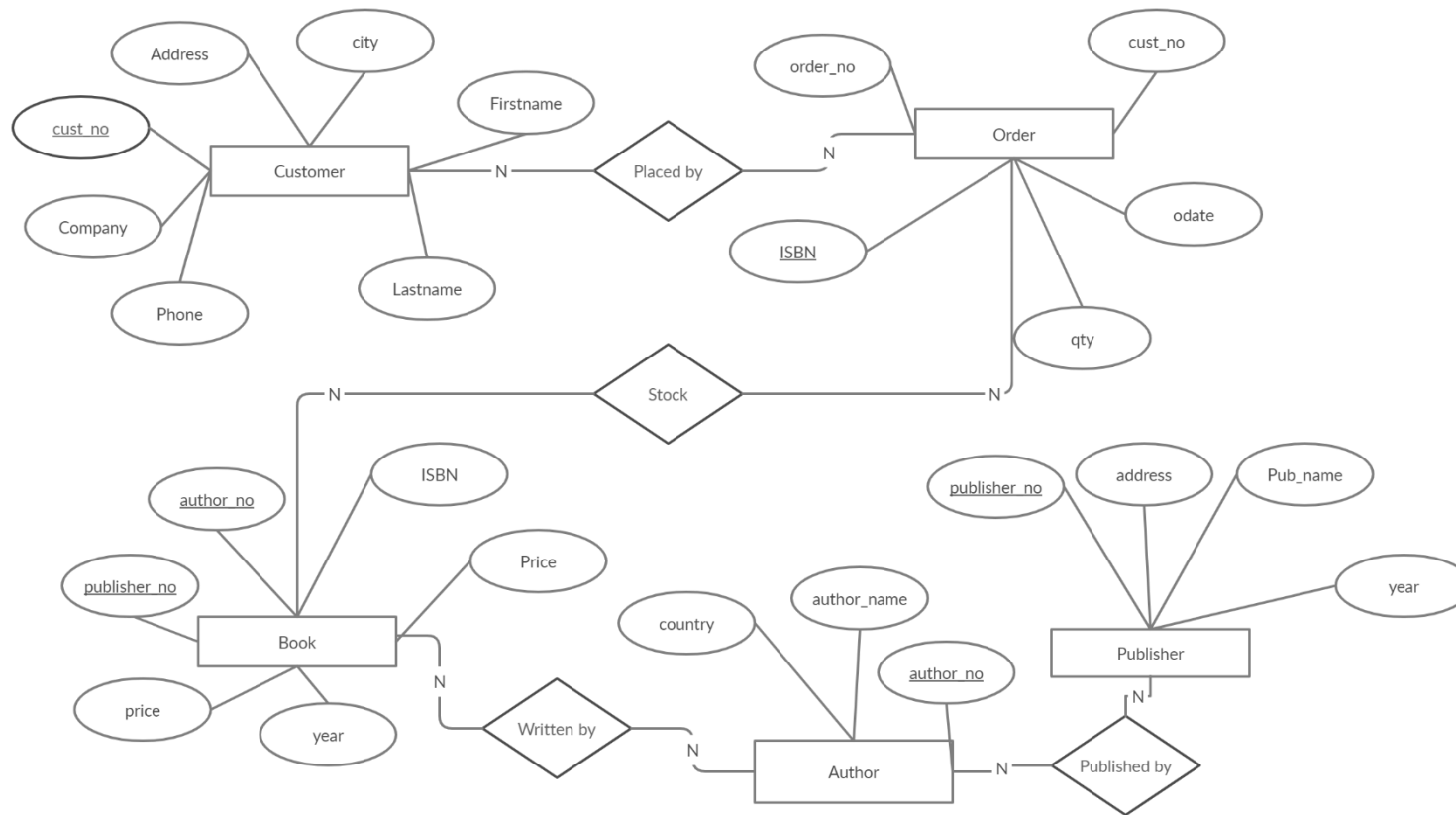


DBMS LAB
Assignment 2
Roll No :- 31384

ER Diagram :-



/* ASSIGNMENT 2 *

- **Code :-**

```
create database book;
```

```
use book;
```

```
create table customer(
```

```
    cust_no int(10) PRIMARY KEY,
```

```
    cust_fname varchar(20),
```

```
    cust_lname varchar(20),
```

```
    cust_company varchar(20),
```

```
    cust_addr varchar(50),
```

```
    city varchar(20),
```

```
    cust_phone varchar(10)
```

```
);
```

```
create table order_ (
```

```
    order_no int(10) PRIMARY KEY,
```

```
        cust_no int(10),

        ISBN varchar(20),

        qty int(10),

        odate date,

        constraint FK_order1 FOREIGN KEY (cust_no) REFERENCES customer(cust_no) ON DELETE CASCADE ON UPDATE CASCADE,

        constraint FK_order2 FOREIGN KEY (ISBN) REFERENCES book(ISBN) ON DELETE CASCADE ON UPDATE CASCADE

    );
```

```
create table book(

    ISBN varchar(20) PRIMARY KEY,

    title varchar(20),

    unitprice int(10),

    author_no int(10),

    publisher_no int(10),

    year int(4),

    constraint FK_book1 FOREIGN KEY (author_no) REFERENCES author(author_no) ON DELETE CASCADE ON UPDATE CASCADE,

    constraint FK_book2 FOREIGN KEY (publisher_no) REFERENCES publisher(publisher_no) ON DELETE CASCADE ON UPDATE CASCADE

);
```

```
create table author(

    author_no int(10) PRIMARY KEY,

    authorname varchar(20),
```

```
country varchar(20)

);

create table publisher(

    publisher_no int(10) PRIMARY KEY,

    publishername varchar(20),

    publisheraddr varchar(20),

    year int(4)

);
```

```
describe customer;
```

```
describe order_;
```

```
describe book;
```

```
describe author;
```

```
describe publisher;
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone)
values(2,"Ramesh","Sisodiya","Mafia","Karsarwadi","Pune","3627367672");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone)
values(3,"Rahul","Tewtia","Robinwood","Koregaon","mumbai","3626235623");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone)
values(4,"Adarsh","Gaikwad","mailstore","rahatani","Pune","365263623");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone)
values(5,"Sambhaji","Wanjare","kohn","milanpur","Satara","3473646734");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) values(6,"Ashutosh","Shinde","ksoew limited","Karsarwadi","Pune","36273672");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) values(7,"Mahesh","Jagtap","hindia","lanjangaon","latur","4334343323");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) values(8,"Krishna","Sawant","Ashwini books","midaln","Ahemdnagar","436534632");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) values(9,"Shritesh","Jagtap","mehera books","koregaon","mumbai","23232332");
```

```
insert into customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) values(10,"Dinesh","Sharma","paras books","lajangaon","latur","42432433");
```

```
select * from customer;
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('11','1','SAGHGSHG1','2392',STR_TO_DATE("August 10 2017", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('12','2','SAGHGSHG2','223',STR_TO_DATE("May 1 2018", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('13','3','SAGHGSHG3','2213',STR_TO_DATE("December 31 2019", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('14','4','SAGHGSHG4','22332',STR_TO_DATE("June 09 2014", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('15','5','SAGHGSHG5','2312',STR_TO_DATE("July 15 2012", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('16','6','SAGHGSHG6','2312',STR_TO_DATE("March 23 2011", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('17','7','SAGHGSHG7','2311',STR_TO_DATE("july 04 2019", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('18','8','SAGHGSHG8','2321',STR_TO_DATE("June 23 2018", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('19','9','SAGHGSHG9','2333',STR_TO_DATE("May 16 2016", "%M %d %Y"));
```

```
insert into order_(order_no,cust_no,ISBN,qty,odate) values('20','10','SAGHGSHG10','2100',STR_TO_DATE("September 12 2013", "%M %d %Y"));
```

```
select * from order_;
```

```
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG1','Seven Habits','230.00','1','1','2004');
```

```
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG2','Things and rich','259.00','1','1','2002');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG3','Succesful man','564.00','1','1','2003');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG4','rich dad poor dad','657.00','1','1','2010');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG5','Games of thrones','2300.00','1','1','2011');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG6','Harry Potter:Goblet of fire','560.00','1','1','2004');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG7','hobitcs','547.00','1','1','2002');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG8','the lean startup','120.00','1','1','2000');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG9','conquer','600.00','1','1','2005');
insert into book(ISBN,title,unitprice,author_no,publisher_no,year) values('SAGHGSHG10','philosphers stone','520.00','1','1','2003');
```

```
select * from book;
```

```
insert into author(author_no,authorname,country) values('1','Mark yenberg','Austrilia');
```

```
insert into author(author_no,authorname,country) values('2','Rutherford','England');
```

```
insert into author(author_no,authorname,country) values('3','Green berg','South africa');
```

```
insert into author(author_no,authorname,country) values('4','Abhishek sharma','India');
```

```
insert into author(author_no,authorname,country) values('5','Tarak Mehta','India');
```

```
insert into author(author_no,authorname,country) values('6','Isacc ken','Austrilia');
```

```
insert into author(author_no,authorname,country) values('7','larry venis','England');
```

```
insert into author(author_no,authorname,country) values('8','G Phillips','Jermany');
```

```
select * from author;
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('1','Broadcast','Mexico','2008');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('2','HBO','England','2015');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('3','T-series','India','2007');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('4','Dharma','India','2010');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('5','Slayy point','India','2009');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('6','Carryminati','India','2006');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('7','Filtercopy','India','2002');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('8','Balaji','India','2001');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('9','Ruthermeg','Spain','2008');
```

```
insert into publisher(publisher_no,publishername,publisheraddr,year) values('10','HBO','England','2013');
```

```
select * from publisher;
```

```
create view book_author as select authorname from author;
```

```
select * from book_author;
```

```
create view pune_customer as select * from customer where city="pune";
```

```
select * from pune_customer;
```

```
create view pub_2004 as select * from publisher where year="2004";  
select * from pub_2004;
```

```
alter table Customer ADD UNIQUE index (cust_fname);  
alter table order_ ADD UNIQUE index (order_no);  
alter table book ADD UNIQUE index(title);
```

```
show index from Customer;  
show index from order_;  
show index from book;
```

```
/* Assignment 3 */
```

```
select * from customer where (city = 'pune' or city = 'mumbai') and (cust_fname LIKE 'a%' or cust_fname LIKE 'd%');  
select DISTINCT city from customer;  
SET SQL_SAFE_UPDATES = 0;  
update book set unitprice = unitprice + (unitprice * 0.05) where year=2015;  
delete from customer where city = 'pune';
```



```
select DISTINCT * from publisher where year IN (2015,2016);
```

```
select * from book where unitprice in(select max(unitprice ) from book);
```

```
select * from book where unitprice between 300 AND 400;
```

```
select title,unitprice,year from book order by year DESC;
```

```
select title,author_no,publisher_no from book where year in(2002,2004,2006);
```

```
/* Assignment 4 */
```

```
select * from Customer natural join order_;
```

```
select book.title,author.authorname,author.country from book left join author on book.author_no = author.author_no;
```

```
select Customer.cust_no,Customer.cust_fname,Customer.cust_lname,Order_.order_no from Customer left join Order_ on Customer.cust_no=Order_.cust_no where  
odate is null;
```

```
select book.title, book.ISBN, Order_.order_no from book left join Order_ on book.ISBN = Order_.ISBN where Order_.odate is null;
```

```
select Customer.cust_fname, book.title, book.author_no , book.year from Customer left join Order_ on Customer.cust_no = Order_.cust_no left join book on Order_.ISBN  
= book.ISBN;
```

```
select count(book.title), Customer.cust_fname,Customer.cust_lname from Customer left join Order_ on Customer.cust_no = Order_.cust_no left join book on Order_.ISBN  
=book.ISBN;
```

```
select Customer.cust_no,Order_.order_no,Order_.ISBN from customer left join Order_ on Customer.cust_no = Order_.cust_no left join book on Order_.ISBN = book.ISBN
where book.title="Conquer";
```

```
select Customer.cust_company from Customer left join Order_ on Customer.cust_no = Order_.cust_no left join book on Order_.ISBN = book.ISBN where book.year=2015;
```

```
use book;
```

```
create view Book_author_view1 as select book.title ,author.author_no,author.authorname,author.country from book left join author on book.author_no=
author.author_no;
```

```
select * from Book_author_view1;
```

Output:-

Customer Table: -


```
describe customer;
```

Field	Type	Null	Key	Default	Extra
cust_no	int	NO	PRI	NULL	
cust_fname	varchar(20)	YES	UNI	NULL	
cust_lname	varchar(20)	YES		NULL	
cust_company	varchar(20)	YES		NULL	
cust_addr	varchar(50)	YES		NULL	
city	varchar(20)	YES		NULL	
cust_phone	varchar(10)	YES		NULL	

Order Table: -

```
Describe order;
```

Result Grid


Filter Rows:



Export:

Wrap

	Field	Type	Null	Key	Default	Extra
▶	order_no	int	NO	PRI	NULL	
	cust_no	int	YES	MUL	NULL	
	ISBN	varchar(20)	YES		NULL	
	qty	int	YES		NULL	
	odate	date	YES		NULL	

Book table:-

Describe book;

Result Grid			Filter Rows: <input type="text"/>	Export: 	Wrap	
	Field	Type	Null	Key	Default	Extra
▶	ISBN	varchar(20)	NO	PRI	NULL	
	title	varchar(20)	YES	UNI	NULL	
	unitprice	int	YES		NULL	
	author_no	int	YES	MUL	NULL	
	publisher_no	int	YES	MUL	NULL	
	year	int	YES		NULL	

Author Table:-

Describe author;

<div> <div><</div> <div>Result Grid</div> <div>Filter Rows: <input type="text"/></div> <div>Export: </div> <div>Wrap Cell Content: <input type="checkbox"/></div> </div>						
	Field	Type	Null	Key	Default	Extra
▶	author_no	int	NO	PRI	NULL	
	authorname	varchar(20)	YES		NULL	
	country	varchar(20)	YES		NULL	

Publisher Table :-

Describe publisher;

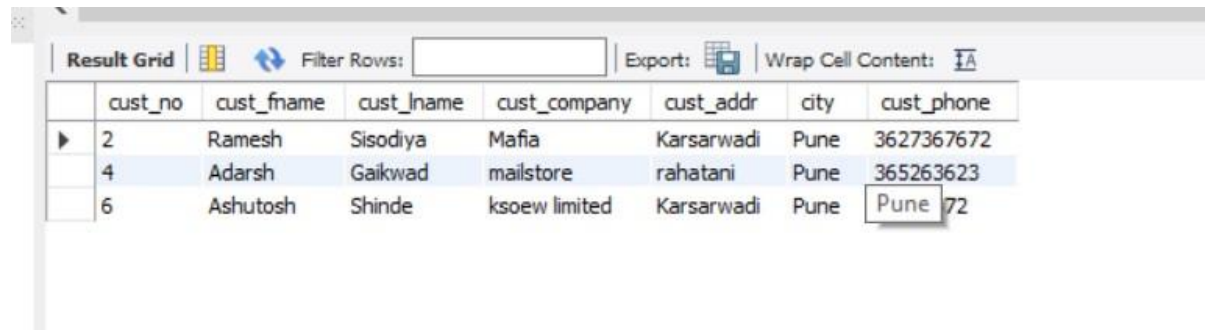
<div> <div>Result Grid</div> <div>Filter Rows: <input type="text"/></div> <div>Export: </div> <div>Wrap Cell: <input type="checkbox"/></div> </div>						
	Field	Type	Null	Key	Default	Extra
▶	publisher_no	int	NO	PRI	NULL	
	publishername	varchar(20)	YES		NULL	
	publisheraddr	varchar(20)	YES		NULL	
	year	int	YES		NULL	

VIEWS :-

```
select * from book_author;
```

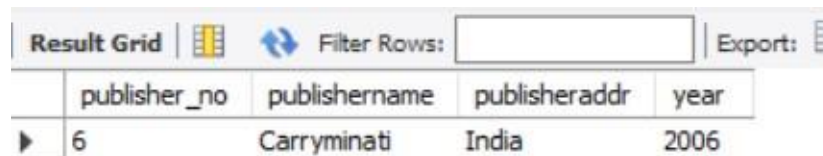
Result Grid		Filter R
	authorname	
▶	Mark yenberg	
	Rutherford	
	Green berg	
	Abhishek sharma	
	Tarak Mehta	
	Isacc ken	
	larry venis	
	G Phillips	

```
select * from pune_customer;
```



	cust_no	cust_fname	cust_lname	cust_company	cust_addr	city	cust_phone
▶	2	Ramesh	Sisodiya	Mafia	Karsarwadi	Pune	3627367672
	4	Adarsh	Gaikwad	mailstore	rahatani	Pune	365263623
	6	Ashutosh	Shinde	ksoew limited	Karsarwadi	Pune	Pune 72

```
select * from pub;
```



	publisher_no	publishername	publisheraddr	year
▶	6	Carryminati	India	2006

INDEXS :-

Result Grid		Filter Rows:		Export:		Wrap Cell Content:								
Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
customer	0	PRIMARY	1	cust_no	A	2	NULL	NULL		BTREE			YES	NULL
customer	0	cust_frame	1	cust_frame	A	9	NULL	NULL	YES	BTREE			YES	NULL

show index from Customer;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
▶	order_	0	PRIMARY	1	ISBN	A	9	NULL	NULL		BTREE			YES	NULL
	order_	1	FK_order1	1	cust no	A	9	NULL	NULL	YES	BTREE			YES	NULL

show index from order_;

show index from book;

Result Grid

Filter Rows:

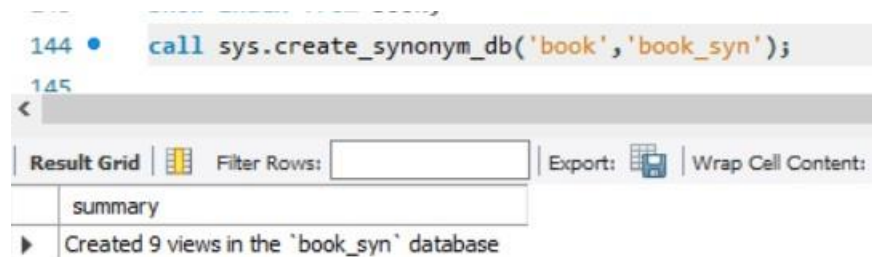
Export:

Wrap Cell Content:

	Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
	book	0	PRIMARY	1	ISBN	A	9	NULL	NULL		BTREE			YES	NULL

Synonyms :-

call sys.create_synonym_db('book','book_syn');



JDBC CODE :-

```
package JDBC;
```

```
import java.sql.*;
```

```
import java.util.Scanner;
```

```
public class JDBC {
```

```
    // JDBC driver name and database URL
```

```
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
```

```
    static final String DB_URL = "jdbc:mysql://localhost:3306/mysql";
```

```
    static int choice;
```



```
static int ch;

static Scanner input=new Scanner(System.in);

// Database credentials

static final String USER = "root";

static final String PASS = "ghule@123";


public static void main(String[] args) throws SQLException {

    Connection conn=null;

    Statement stmt=null;

    ResultSet myRs=null;

    try{

        Class.forName("com.mysql.cj.jdbc.Driver");

        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/student1","root","ghule@123");

        stmt=conn.createStatement();

        do {

            System.out.println("1.Create table");

            System.out.println("2.Insert table");

            System.out.println("3.Update table");

            System.out.println("4.Drop table");

            choice=input.nextInt();

            switch(choice)
```

```

{
    case 1: System.out.println("Creating table in given database...");

        stmt = conn.createStatement();

        String sql = "CREATE TABLE REGISTRATION " +
            "(id INTEGER not NULL, " +
            " first VARCHAR(255), " +
            " last VARCHAR(255), " +
            " age INTEGER, " +
            " PRIMARY KEY ( id ))";

        stmt.executeUpdate(sql);

        System.out.println("Created REGISTRATION table in given database..."
            + "with columns id firstname lastname age ");

        myRs=stmt.executeQuery("Select * from REGISTRATION");

        System.out.println("Table haveno values inserted ");

        break;

    case 2: System.out.println("Inserting records into the table...");

        stmt = conn.createStatement();

        String sql1 = "INSERT INTO Registration " +
            "VALUES (100, 'Zara', 'Ali', 18)";

```

```
stmt.executeUpdate(sql1);

sql1 = "INSERT INTO Registration " +
        "VALUES (101, 'Mahnaz', 'Fatma', 25)";

stmt.executeUpdate(sql1);

sql1 = "INSERT INTO Registration " +
        "VALUES (102, 'Zaid', 'Khan', 30)";

stmt.executeUpdate(sql1);

sql1 = "INSERT INTO Registration " +
        "VALUES(103, 'Sumit', 'Mittal', 28)";

stmt.executeUpdate(sql1);

System.out.println("Inserted records into the table...");

System.out.println("4 rows are added... ");

sql1 = "SELECT id, first, last, age FROM Registration";

ResultSet rs = stmt.executeQuery(sql1);

while(rs.next()){

    //Retrieve by column name

    int id = rs.getInt("id");

    int age = rs.getInt("age");

    String first = rs.getString("first");

    String last = rs.getString("last");


    //Display values

    System.out.print("ID: " + id);
```

```
        System.out.print(", Age: " + age);

        System.out.print(", First: " + first);

        System.out.println(", Last: " + last);
    }

    break;

case 3: System.out.println("Creating statement...");

    stmt = conn.createStatement();

    String sql11 = "UPDATE Registration " +

        "SET age = 30 WHERE id in (100, 101)";

    stmt.executeUpdate(sql11);


    // Now you can extract all the records

    // to see the updated records

    System.out.println("Age 30 is Set where Id is 100 and 101 ");

    sql11 = "SELECT id, first, last, age FROM Registration";

    ResultSet rs1 = stmt.executeQuery(sql11);


    while(rs1.next()){

        //Retrieve by column name

        int id = rs1.getInt("id");

        int age = rs1.getInt("age");

        String first = rs1.getString("first");

        String last = rs1.getString("last");
```

```
        //Display values  
        System.out.print("ID: " + id);  
        System.out.print(", Age: " + age);  
        System.out.print(", First: " + first);  
        System.out.println(", Last: " + last);  
    }  
}
```

```
        break;
```

```
case 4: System.out.println("Deleting table in given database...");
```

```
        stmt = conn.createStatement();
```

```
        String sql111 = "DROP TABLE REGISTRATION ";
```

```
        stmt.executeUpdate(sql111);
```

```
        System.out.println("Table deleted in given database...");
```

```
        break;
```

```
default: System.out.println("Wrong choice...");
```

```
        break;
```

```
    }
```

```
    System.out.println("Continue ?");
```

```
    ch= input.nextInt();
```

```
}while(ch==1);
```

```
}
```

```
catch(Exception ex)
```

```
{
```

```
    ex.printStackTrace();
```

```
}
```

```
finally{
```

```
    if(myRs!=null) {
```

```
        myRs.close();}
```

```
    if(stmt!=null)
```

```
    {
```

```
        stmt.close();
```

```
    }
```

```
    if(conn !=null)
```

```
    {
```

```
        conn.close();
```

```
    }
```

```
}
```

```
}//end main
```

```
}//end JDBCExample
```

JDBC CODE

eclipse-workspace - Database-connection/src/JDBC/JDBC.java - Eclipse IDE

File Edit Navigate Search Project Run Window Help

JDBC [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (05-Sep-2020, 11:59:28 pm)

Enter Your choice :

4

Department Table Data

1	CM
2	IF
3	CM
4	IF
5	ME
6	CE
7	CM
8	IF
9	ME
10	CE

Professors Table Data

1	abc1	def1	designation1	20000	1-1-2015	abc@gmail.com	9821343134	Pune	1
2	dbc1	eef1	designation2	21000	3-8-2016	dbc1@gmail.com	9721343134	Mumbai	2
3	arc1	dtf1	designation3	12000	4-8-2020	arc1@gmail.com	9621343134	Pune	3
4	dfy1	def1	designation4	23000	1-1-2015	dfyc@gmail.com	9521343134	Pune	4
5	obc1	def1	designation5	18000	6-8-2020	obc1c@gmail.com	9421343134	Nashik	5
6	pic1	def1	designation6	25000	1-1-2016	pic1@gmail.com	9321343134	Mumbai	6
7	art1	def1	designation7	16000	8-8-2020	art1@gmail.com	9221343134	Pune	7
8	dip1	def1	designation8	47000	1-1-2015	dip1@gmail.com	9121343134	Mumbai	8
9	may1	def1	designation9	30000	1-1-2016	may1@gmail.com	9021343134	Satara	9
10	dqtc1	def1	designation10	59000	11-8-2020	dqtc1c@gmail.com	9001343134	Mumbai	10

Works Table Data

1	1	2
2	2	3
3	3	2
4	4	3
5	5	4
6	6	2
7	7	3
8	8	4
9	9	3
10	10	2

43 System.out.println("\nShift table Created!!!");

27% 00:00 06-09-2020

Key : PRI
 Default : null
 Extra :

Menu

1. Alter Table(Add Not Null constraint)
2. Create View
3. Create Index
4. Show Table data
5. Show view Data
6. Exit

Enter Your choice :

2

Creating view

Menu

1. Alter Table(Add Not Null constraint)
2. Create View
3. Create Index
4. Show Table data
5. Show view Data
6. Exit

Enter Your choice :

3

All indexes present in Professors Table

professors	0	PRIMARY 1	prof_id A	10	null	null	BTREE
professors	0	PRIMARY 2	dept_id A	10	null	null	BTREE
professors	1	fk_prof 1	dept_id A	10	null	null	BTREE

Applying Indices on Professors Table(Prof_fname)!!!

id	select_type	tableName	Partitions	type	possible_keys	key	key_len	ref	rows	filtered
1	SIMPLE	Professors	null	ref	idx1 idx1	42	const	1	100.0	

43 System.out.println("\nShift table Created!!!");

eclipse-workspace - Database-connection/src/JDBC/JDBC.java - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Problems Javadoc Declaration Console

JDBC [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (05-Sep-2020, 11:59:28 pm)

Default : null
Extra :

After Applying constraint Table Description

Departments Table Description

Fields : dept_id
Type : int
Null : NO
Key : PRI
Default : null
Extra : auto_increment

Fields : dept_name
Type : varchar(2)
Null : NO
Key :
Default : null
Extra :

Professors Table Description

Fields : prof_id
Type : int
Null : NO
Key : PRI
Default : null
Extra : auto_increment

Fields : prof_fname
Type : varchar(10)
Null : NO
Key :
Default : null
Extra :

Fields : prof_lname
Type : varchar(10)

43 System.out.println("\nShift table Created!!!");

Type here to search

27% 00:00 06-09-2020

eclipse-workspace - Database-connection/src/JDBC/JDBC.java - Eclipse IDE

File Edit Navigate Search Project Run Window Help

JDBC [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (05-Sep-2020, 11:59:28 pm)

```
Department table Created!!!
Professor table Created!!!
Works table Created!!!
Shift table Created!!!
Data Inserted Successfully!!!

***Menu***
1. Alter Table(Add Not Null constraint)
2. Create View
3. Create Index
4. Show Table data
5. Show view Data
6. Exit
Enter Your choice :
1
Before Applying Not null constraint

Departments Table Description
Fields : dept_id
Type : int
Null : NO
Key : PRI
Default : null
Extra : auto_increment

Fields : dept_name
Type : varchar(2)
Null : NO
Key :
Default : null
Extra :

Professors Table Description
43      System.out.println("\nShift table Created!!!");
```

Type here to search

27% 00:00 06-09-2020

eclipse-workspace - Database-connection/src/JDBC/JDBC.java - Eclipse IDE

File Edit Navigate Search Project Run Window Help

JDBC [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (05-Sep-2020, 11:59:28 pm)

6. Exit
Enter Your choice :

4

Department Table Data

1	CM
2	IF
3	CM
4	IF
5	ME
6	CE
7	CM
8	IF
9	ME
10	CE

Professors Table Data

1	abc1	def1	designation1	20000	1-1-2015	abc@gmail.com	9821343134	Pune	1
2	dbc1	eef1	designation2	21000	3-8-2016	dbc1@gmail.com	9721343134	Mumbai	2
3	arc1	dtf1	designation3	12000	4-8-2020	arc1@gmail.com	9621343134	Pune	3
4	dfy1	def1	designation4	23000	1-1-2015	dfyc@gmail.com	9521343134	Pune	4
5	obc1	def1	designation5	18000	6-8-2020	obc1c@gmail.com	9421343134	Nashik	5
6	pic1	def1	designation6	25000	1-1-2016	pic1@gmail.com	9321343134	Mumbai	6
7	art1	def1	designation7	16000	8-8-2020	art1@gmail.com	9221343134	Pune	7
8	dip1	def1	designation8	47000	1-1-2015	dip1@gmail.com	9121343134	Mumbai	8
9	may1	def1	designation9	30000	1-1-2016	may1@gmail.com	9021343134	Satara	9
10	dqtc1	def1	designation10	59000	11-8-2020	dqtc1c@gmail.com	9001343134	Mumbai	10

Works Table Data

1	1	2
2	2	3
3	3	2
4	4	3
5	5	4
6	6	2
7	7	3
8	8	4
9	9	3

43 System.out.println("\nShift table Created!!!");

Type here to search

27% 00:00 06-09-2020

Assignment No 2

Title - Design & Develop SQL DDL statements which

eclipse-workspace - Database-connection/src/JDBC/JDBC.java - Eclipse IDE
File Edit Navigate Search Project Run Window Help
JDBC [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (05-Sep-2020, 11:59:28 pm)
Menu

1. Alter Table(Add Not Null constraint)
 2. Create View
 3. Create Index
 4. Show Table data
 5. Show view Data
 6. Exit
- Enter Your choice :

5

Dept_id dept_name

1	CM
2	IF
3	CM
4	IF
5	ME
6	CE
7	CM
8	IF
9	ME
10	CE

Prof_id Dept_id Duration

1	1	2
2	2	3
3	3	2
4	4	3
5	5	4
6	6	2
7	7	3
8	8	4
9	9	3
10	10	2

Prof_id Shift Work_hr

1	first	2
---	-------	---

43 System.out.println("\nShift table Created!!!");

Language which deals with data schemas & description, of how data can reside in database.

Various commands

1) Create :- Create table command defines each attribute uniquely.

- 1) Attribute name
- 2) Attribute size
- 3) Data type

Syntax - Create table tablename (Attribute name (size) n);

② Alter - Used to alter Data

Syntax - Alter table <table-name> ADD
<newcolumn> <Datatype> <size> n)

we can use ADD, DROP, MODIFY as per convenience.

③ Drop - Used to drop table

Syntax - Drop table <table-name>

④ Truncate - Used to delete values from table.

Syntax - Truncate table <table-name>

⑤ Rename - Rename the table

Syntax - Rename <oldName> <NewName>

⑥ Creating view - Can be created from single or multiple tables

Syntax -
Create View view-name as select column1,
column2 from tablename where [condition]

• Updating a view -

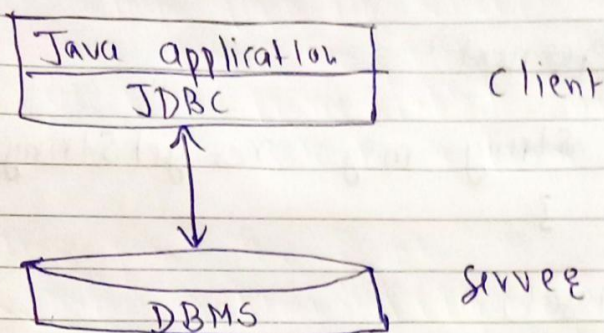
views can be updated

e.g. update customer view set Age = 35 where name = 'Ramesh'

• Inserting Rows into view

same rule by update apply insert command.

Two-tier & three-tier architecture -



• Following steps involved in the process of connecting to a database & executing query consist following.

- 1) Import JDBC package
- 2) Load & register the JDBC Driver.
- 3) open connection to database.
- 4) create statement
- 5) Execute statement
- 6) process resultSet
- 7) close the resultSet & statement object.
- 8) close connection.

Step 1) import java.sql.*;
Step 2) String url = "jdbc:mysql://192.168.5.101:3306/";
String user = "abc";
String pass = "abc123";
Step 3) Connection conn =
DriverManager.getConnection(url, user, pass);
Step 4) Statement sql = conn.createStatement();
ResultSet rset = sql.createStatement().executeQuery("select * from emp");
Step 5) while (rset.next())
{
String msg = rset.getString("ename");
}
Step 6) rset.close();
Step 7) conn.close();

Conclusion :-

Thus we successfully completed the DDL commands.