Q. Create following tables in MYSQL
Customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone)
order(order_no,cust_no,ISBN,qty,odate);
book(ISBN,title,unit_price,author_no,publisher_no,pub_year);
author(author_no,author_name,country)
publisher(publisher_no,publisher_name,publisher_addr,year);
Note:Use referential integrity constraints while creating tables with on delete cascade options.
Create view, index, sequence and synonym based on above tables.

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

public class Assignment2 {

    public static void main(String[] args) {

        String url = "jdbc:mysql://10.10.13.31:3306/";
        String dbName = "t31255db";
        String driver = "com.mysql.jdbc.Driver";
        String username = "t31255";
        String password = "t31255";
        try
        {
            Scanner in = new Scanner(System.in);
            Class.forName(driver);
            Connection conn = DriverManager.getConnection(url+dbName, username, password);
            Statement st = conn.createStatement();
            ResultSet rs;
            String n = null;
            while(true)
            {
                System.out.print("Enter your choice: \n1.Create view\n2.Select view\n3.Create index\n4.Show index\n5.Create sequence\n6.Drop view\n7.Drop index\n8.Exit\n");
                int c = in.nextInt();
                switch(c)
                {
                case 1:
                    System.out.print("Enter name: ");
                    n = in.next();
                    st.executeUpdate("create or replace view "+n+" as select name,roll,age,mathM from student2;");
                    System.out.println("View created");
                    break;
                case 2:
                    if(n == null)
                        System.out.println("Create view first");
                    else
                    {
                        rs = st.executeQuery("select * from "+n+";");
                        while(rs.next())
                        {
                            System.out.println("Name:
```

```java
                                                                  "+rs.getString(1));
                                                        System.out.println("Roll number:
                                        "+rs.getInt(2));
                                                        System.out.println("Age:
                                        "+rs.getInt(3));
                                                        System.out.println("Math:
                                        "+rs.getFloat(4));
                                                        System.out.println();
                                                }
                                        }
                                        break;
                                case 3:
                                        st.executeUpdate("create unique index i1 on
student2(name);");
                                        st.executeUpdate("create index i2 on
student2(mathM);");
                                        st.executeUpdate("create index i3 on student2(roll,
age);");
                                        System.out.println("Indices created");
                                        break;
                                case 4:
                                        rs = st.executeQuery("show index from
t31255db.student2;");
                                        while(rs.next())
                                        {
                                                System.out.println("Table:
"+rs.getString("Table")+ "\nKey Name: "+rs.getString("Key_name")+"\nIndex type:
"+rs.getString("Index_type"));
                                                System.out.println();
                                        }
                                        break;
                                case 5:
                                        st.executeUpdate("create table table1(roll int
primary key auto_increment, name varchar(20));");
                                        System.out.println("Table with auto increment
created");
                                        st.executeUpdate("insert into table1(name)
values('Ridhwik');");
                                        st.executeUpdate("insert into table1(name)
values('Ritesh');");
                                        break;
                                case 6:
                                        st.executeUpdate("drop view if exists "+n+";");
                                        System.out.println("View dropped");
                                        break;
                                case 7:
                                        st.executeUpdate("alter table student2 drop index
i1;");
                                        st.executeUpdate("alter table student2 drop index
i2;");
                                        st.executeUpdate("alter table student2 drop index
i3;");
                                        System.out.println("Indices dropped");
                                        break;
                                case 8:
                                        System.exit(0);
                                        break;
                        }
```

```
                    }
            }
            catch(Exception e)
            {
                    e.printStackTrace();
            }
        }

}
```

OUTPUT

```
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
1
Enter name: abcde
View created
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
2
Name: Ridhwik
Roll number: 31255
Age: 19
Math: 99.0

Name: Ritesh
Roll number: 31256
Age: 20
Math: 90.0

Name: Ketaki
Roll number: 34
Age: 26
Math: 70.0

Name: Raj
Roll number: 31253
Age: 20
Math: 97.0

Name: a
```

```
Roll number: 2
Age: 2
Math: 2.0

Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
3
Indices created
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
4
Table: student2
Key Name: i1
Index type: BTREE

Table: student2
Key Name: i2
Index type: BTREE

Table: student2
Key Name: i3
Index type: BTREE

Table: student2
Key Name: i3
Index type: BTREE

Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
5
Table with auto increment created
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
```

```
6.Drop view
7.Drop index
8.Exit
6
View dropped
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
7
Indices dropped
Enter your choice:
1.Create view
2.Select view
3.Create index
4.Show index
5.Create sequence
6.Drop view
7.Drop index
8.Exit
8
```