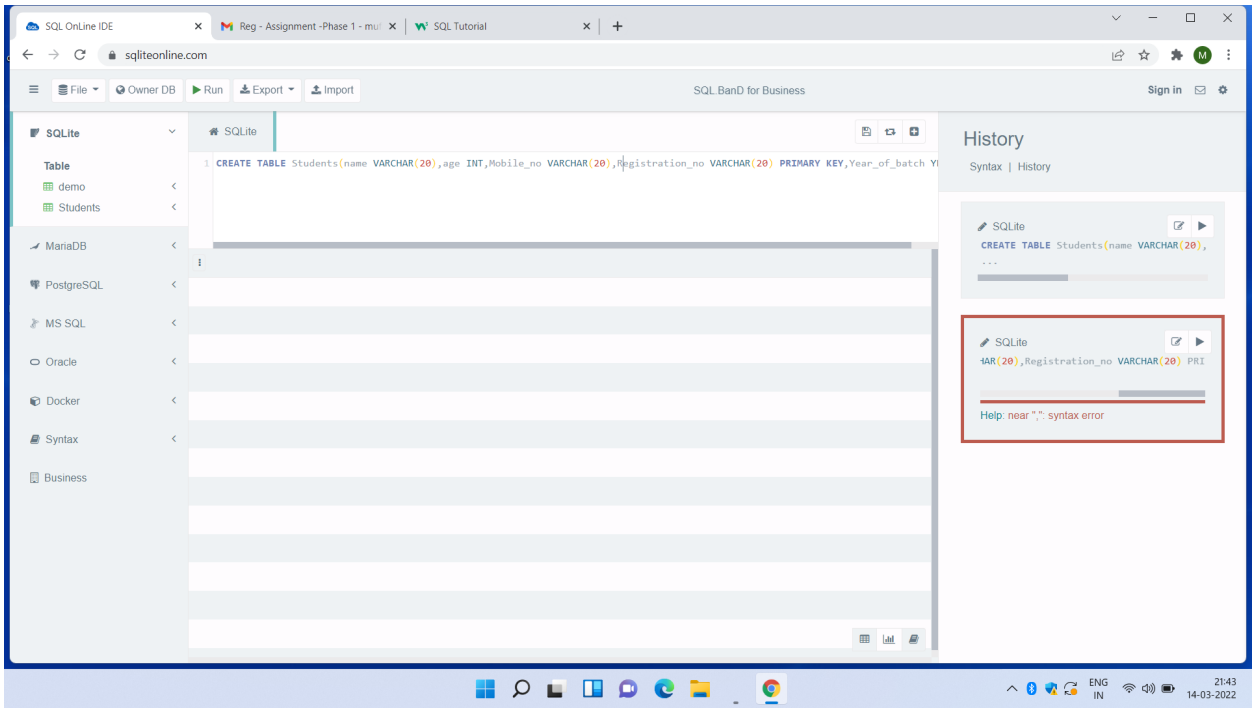
ASSIGNMENT-1

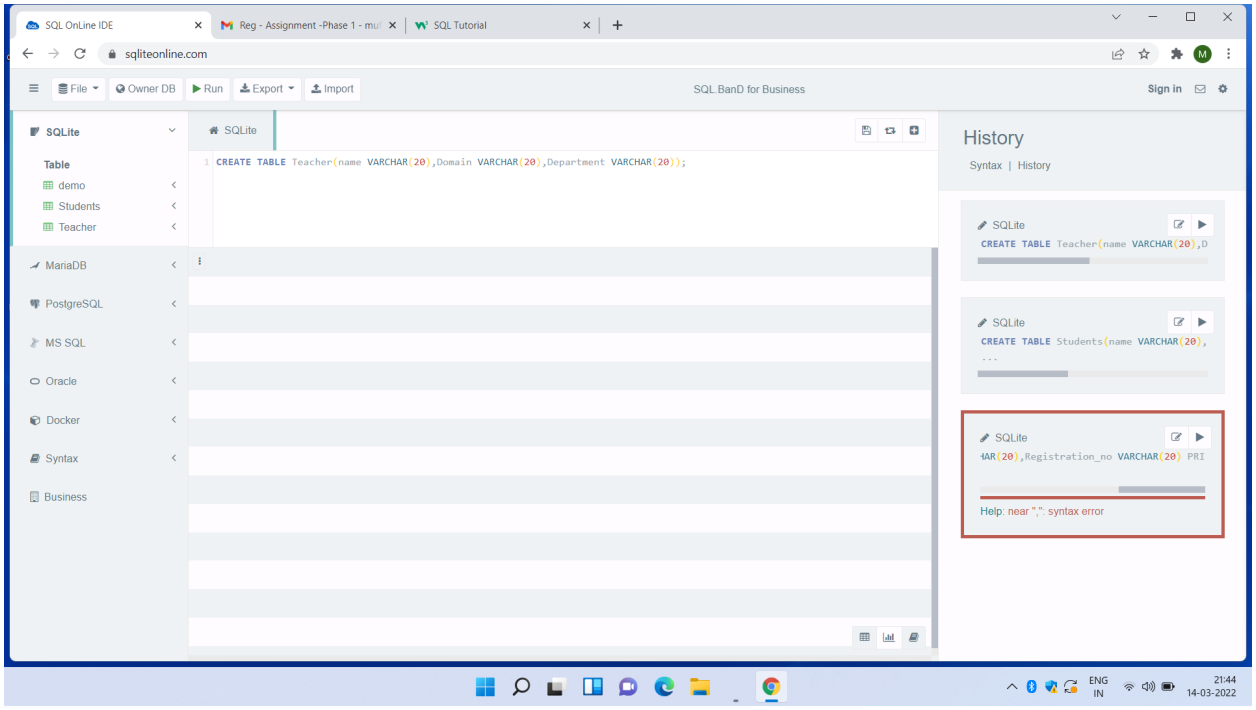
SQLite

CREATE

CREATE TABLE Students(name VARCHAR(20),age INT,Mobile_no VARCHAR(20),Registration_no VARCHAR(20) PRIMARY KEY,Year_of_batch year);

CREATE TABLE Teacher(name VARCHAR(20),Domain VARCHAR(20),Department VARCHAR(20));





INSERT

STUDENTS

INSERT INTO Students VALUES("Mufees",19,9881222121,211211,2019);

INSERT INTO Students VALUES("Arjun",19,7333111441,211212,2019);

INSERT INTO Students VALUES("Nawaz",19,6323111441,211226,2019);

INSERT INTO Students VALUES("Manoj",19,6313122442,211231,2019);

INSERT INTO Students VALUES("Madhav",20,6213212112,211241,2020);

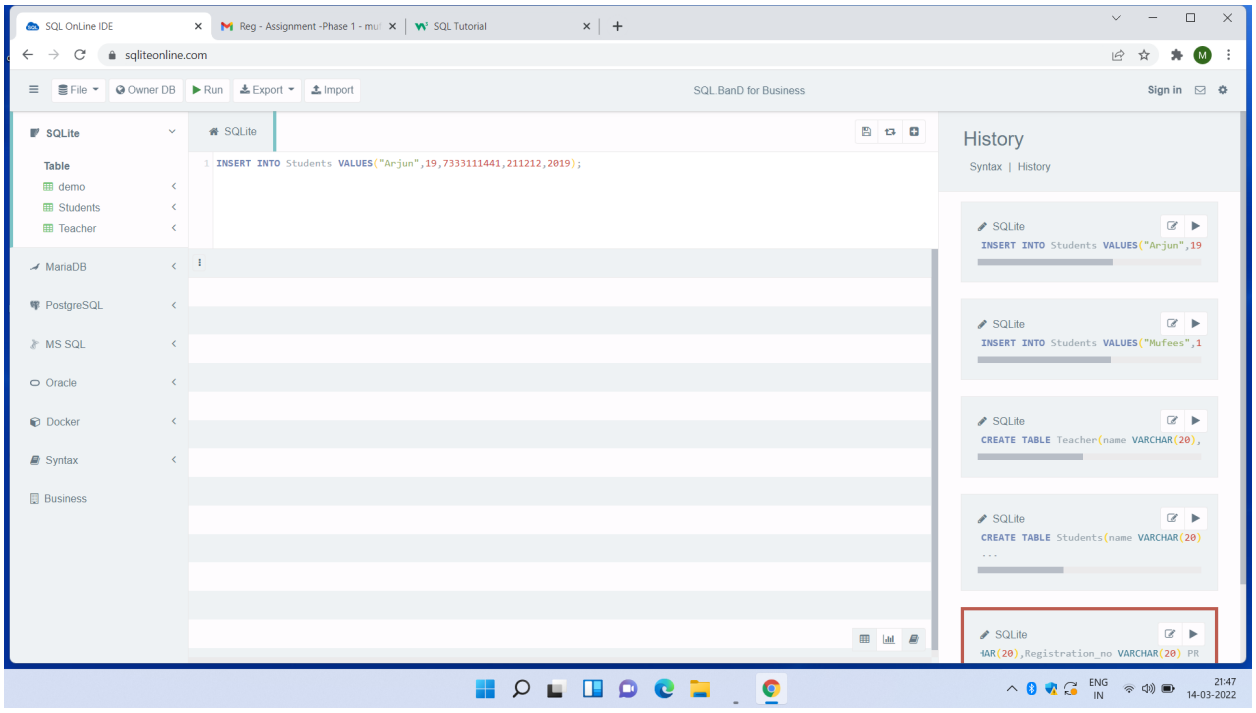
INSERT INTO Students VALUES("Harish",20,6443292110,211221,2020);

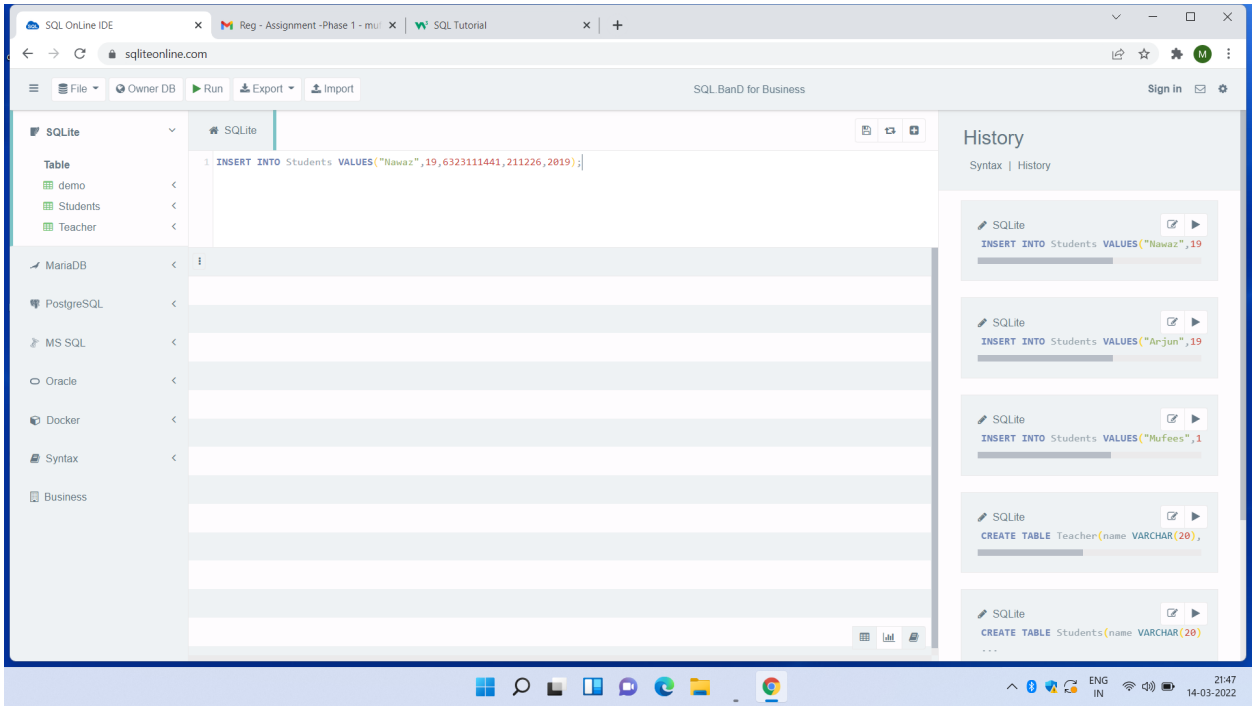
INSERT INTO Students VALUES("Sabariesh",20,6221292112,211311,2020);

INSERT INTO Students VALUES("Laxhman",18,6331292112,311251,2021);

INSERT INTO Students VALUES("Arun",18,6331292111,311211,2021);

INSERT INTO Students VALUES("John",19,61312121321,311221,2020);

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SQLite
Table
demo
Students
Teacher
MariaDB
PostgreSQL
MS SQL
Oracle
Docker
Syntax
Business
INSERT INTO Students VALUES("Nawaz",19,6323111441,211226,2019);
History
Syntax | History
INSERT INTO Students VALUES("Nawaz",19
INSERT INTO Students VALUES("Arjun",19
INSERT INTO Students VALUES("Mufees",1
CREATE TABLE Teacher(name VARCHAR(20),
CREATE TABLE Students(name VARCHAR(20)
ENG
IN
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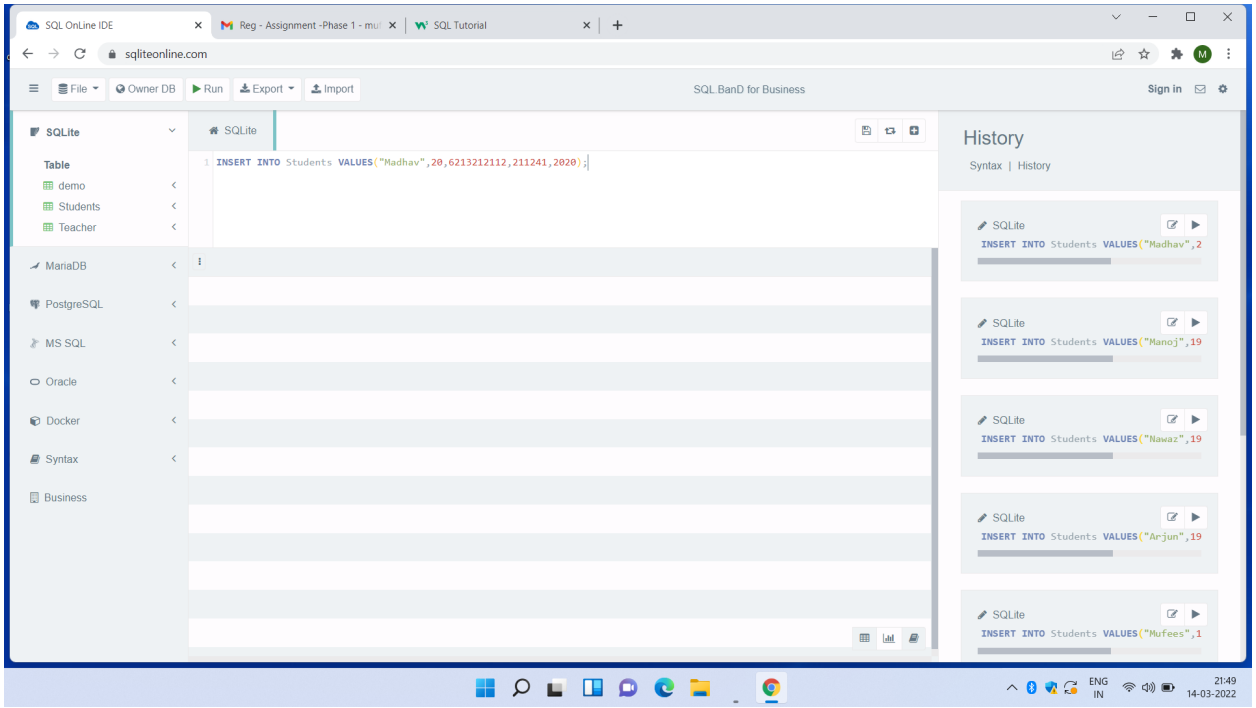
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Students
Teacher
MariaDB
PostgreSQL
MS SQL
Oracle
Docker
Syntax
Business
INSERT INTO Students VALUES("Madhav",20,6213212112,211241,2020);
History
Syntax | History
INSERT INTO Students VALUES("Madhav",2
INSERT INTO Students VALUES("Manoj",19
INSERT INTO Students VALUES("Nawaz",19
INSERT INTO Students VALUES("Arjun",19
INSERT INTO Students VALUES("Mufees",1
ENG
IN
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14-03-2022

Teacher

INSERT INTO Teacher VALUES("Danial","Cyber Security","Information Technology");

INSERT INTO Teacher VALUES("Savitha","Web Developer","Information Technology");

INSERT INTO Teacher VALUES("Raman","Virtual Reality","Computer Science ");

INSERT INTO Teacher VALUES("Raju","Blockchain","Information Technology");

INSERT INTO Teacher VALUES("Ravi","Blockchain","Information Technology");

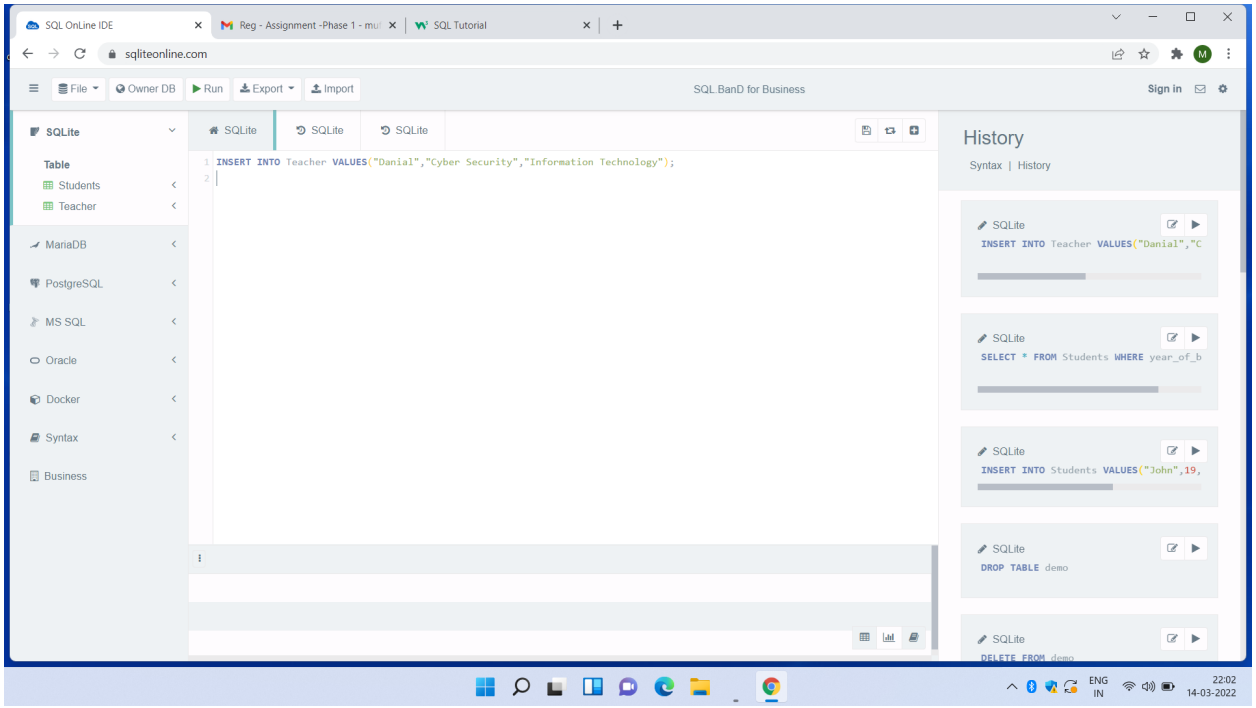
INSERT INTO Teacher VALUES("Swami","Mobile Technology","Computer Science");

INSERT INTO Teacher VALUES("Arthi","Machine Learning","Information Technology");

INSERT INTO Teacher VALUES("Varma","Internet of Things","Electrical Communication Engineering");

INSERT INTO Teacher VALUES("Priya","Front End Developer","Information Technology");

INSERT INTO Teacher VALUES("Santhosh","Back End Developer","Information Technology");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Sign in
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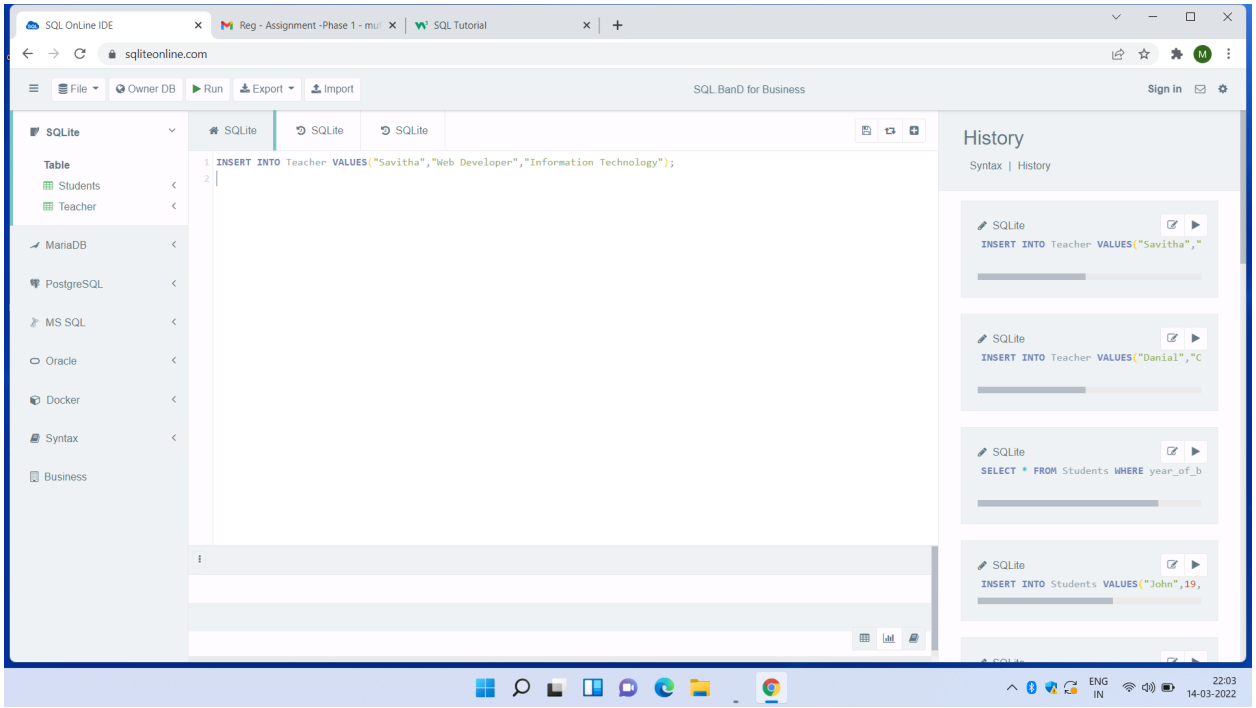
Table
Students
Teacher
MariaDB
PostgreSQL
MS SQL
Oracle
Docker
Syntax
Business
SQLite
SQLite
SQLite
1 INSERT INTO Teacher VALUES("Danial","Cyber Security","Information Technology");
2
History
Syntax | History
SQLite
INSERT INTO Teacher VALUES("Danial","C
SQLite
SELECT * FROM Students WHERE year_of_b
SQLite
INSERT INTO Students VALUES("John",19,
SQLite
DROP TABLE demo
SQLite
DELETE FROM demo
ENG
IN
22:02
14-03-2022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Students
Teacher
MariaDB
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MS SQL
Oracle
Docker
Syntax
Business
SQLite
SQLite
SQLite
1 INSERT INTO Teacher VALUES("Savitha","Web Developer","Information Technology");
2
History
Syntax | History
SQLite
INSERT INTO Teacher VALUES("Savitha","
SQLite
INSERT INTO Teacher VALUES("Danial","C
SQLite
SELECT * FROM Students WHERE year_of_b
SQLite
INSERT INTO Students VALUES("John",19,
ENG
IN
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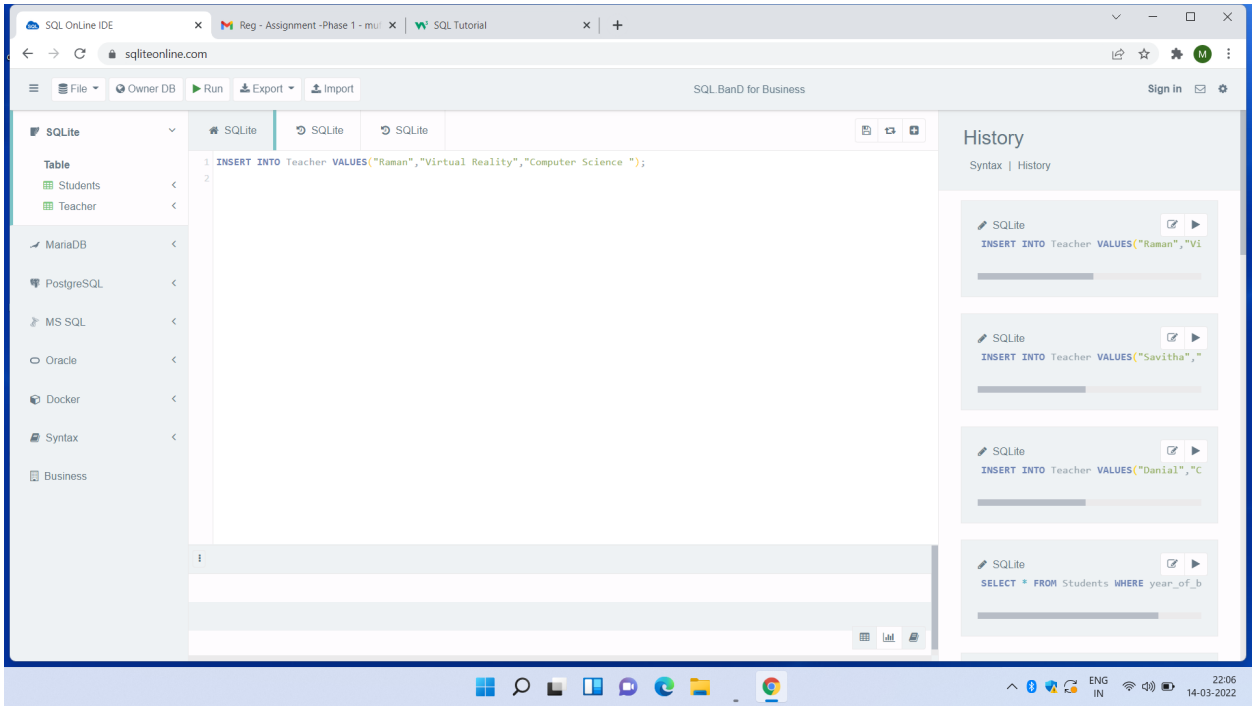
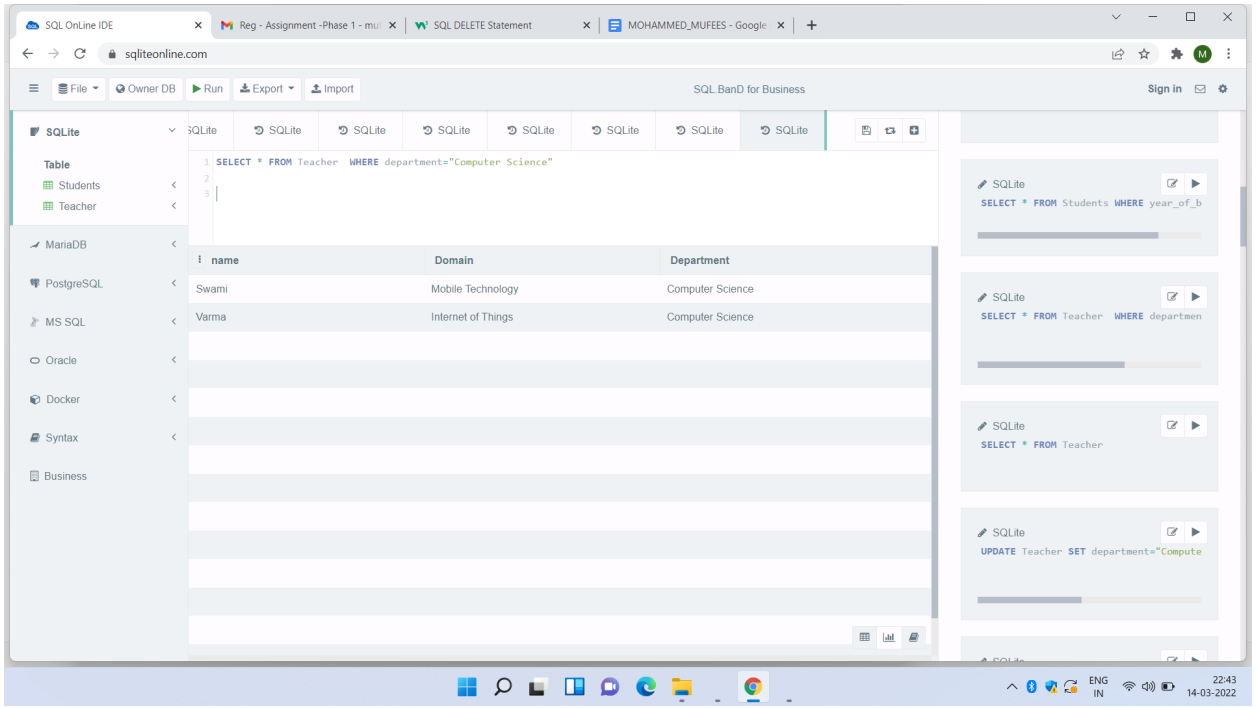


VIEW

SELECT * FROM Students WHERE year_of_batch=2020

SELECT * FROM Teacher WHERE department="Computer Science"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Students
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PostgreSQL
MS SQL
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Docker
Syntax
Business
SELECT * FROM Teacher WHERE department="Computer Science"
name
Domain
Department
Swami
Mobile Technology
Computer Science
Varma
Internet of Things
Computer Science
SELECT * FROM Students WHERE year_of_b
SELECT * FROM Teacher WHERE departmen
SELECT * FROM Teacher
UPDATE Teacher SET department="Compute
ENG
IN
22:43
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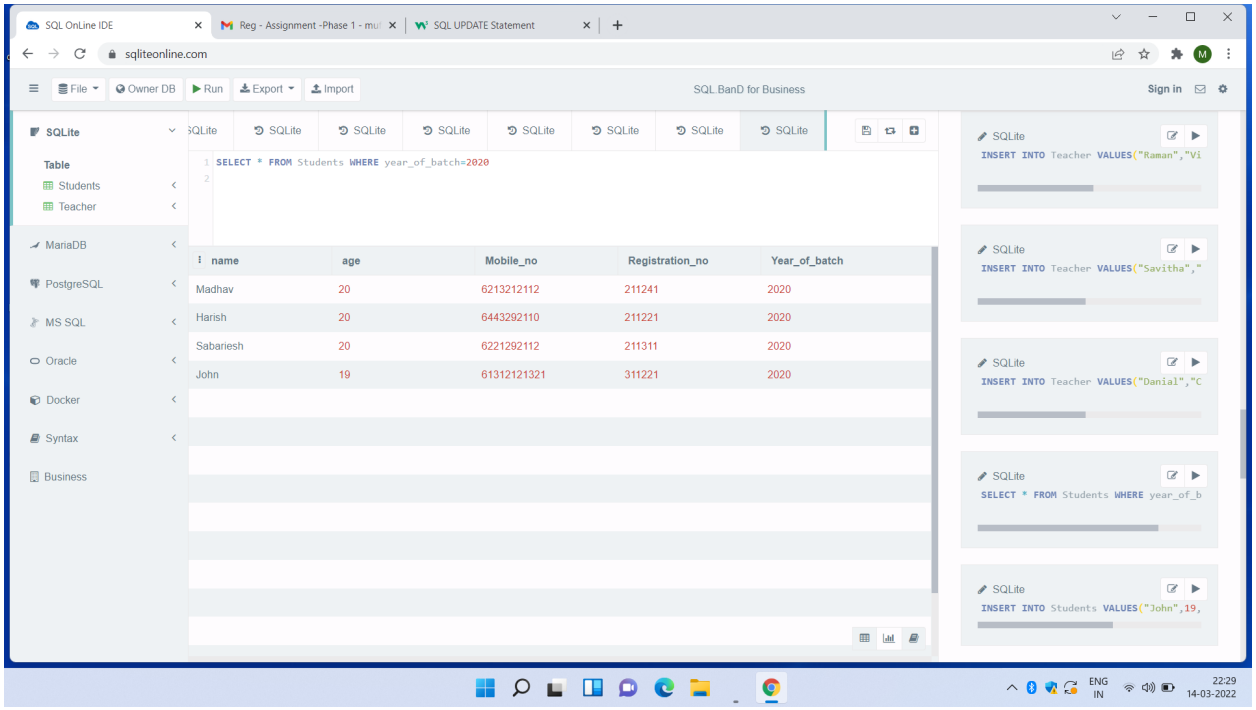
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SQL UPDATE Statement
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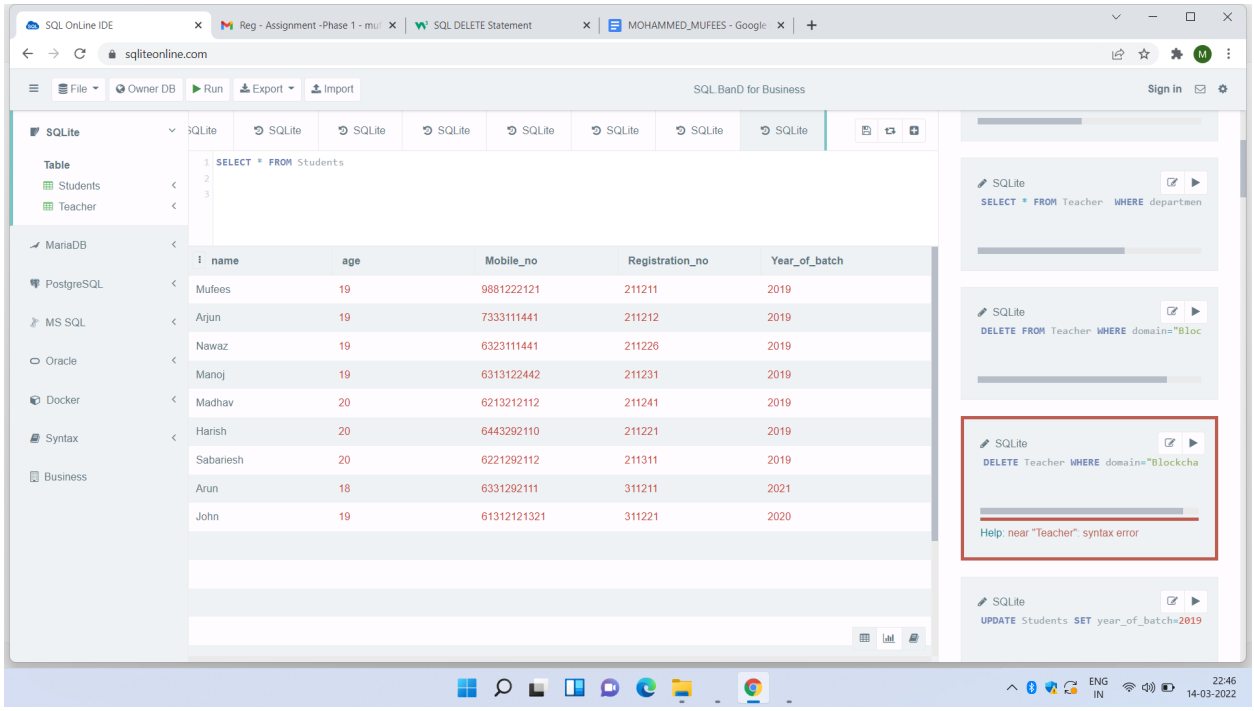
Students
Teacher
MariaDB
PostgreSQL
MS SQL
Oracle
Docker
Syntax
Business
SELECT * FROM Students WHERE year_of_batch=2020
name
age
Mobile_no
Registration_no
Year_of_batch
Madhav
20
6213212112
211241
2020
Harish
20
6443292110
211221
2020
Sabariesh
20
6221292112
211311
2020
John
19
61312121321
311221
2020
INSERT INTO Teacher VALUES("Raman","Vi
INSERT INTO Teacher VALUES("Savitha","
INSERT INTO Teacher VALUES("Danial","C
SELECT * FROM Students WHERE year_of_b
INSERT INTO Students VALUES("John",19,
ENG
IN
22:29
14-03-2022

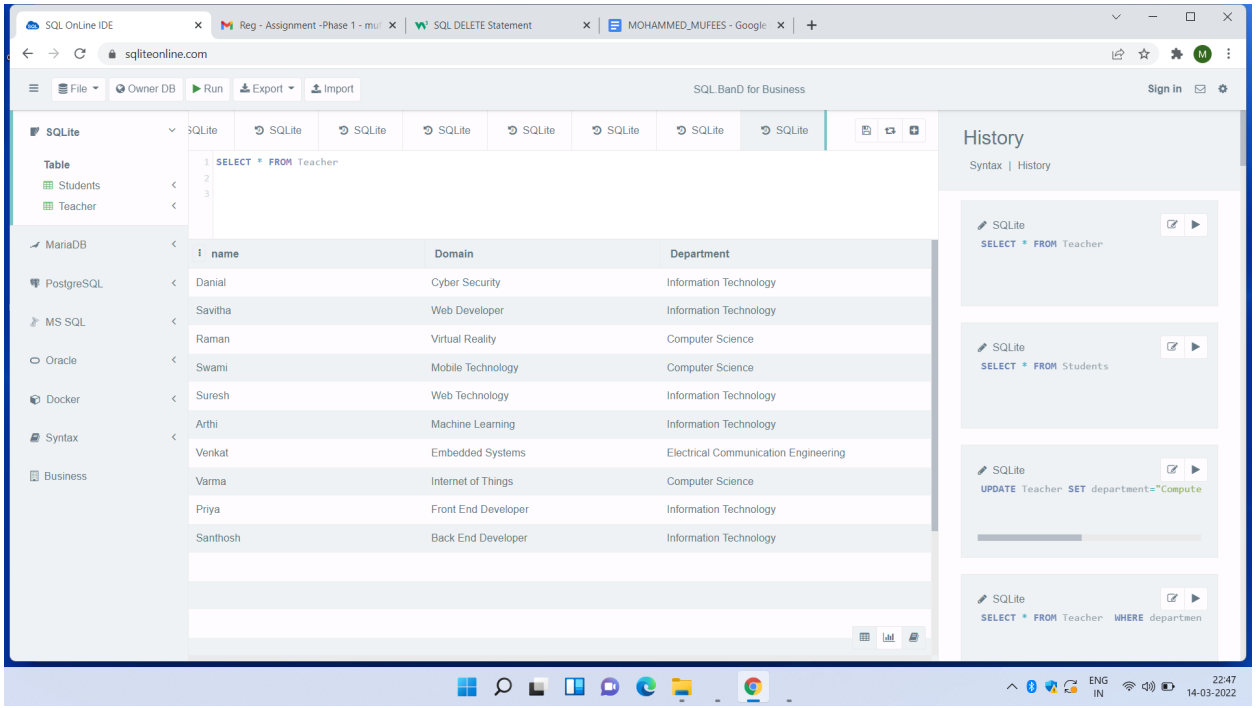
UPDATE

UPDATE Students SET year_of_batch=2019 WHERE age=20



DELETE

DELETE FROM Teacher WHERE domain="Blockchain"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SQL DELETE Statement
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File
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Sign in
SQLite
Table
Students
Teacher
MariaDB
PostgreSQL
MS SQL
Oracle
Docker
Syntax
Business
SELECT * FROM Teacher
name
Domain
Department
Danial
Cyber Security
Information Technology
Savitha
Web Developer
Information Technology
Raman
Virtual Reality
Computer Science
Swami
Mobile Technology
Computer Science
Suresh
Web Technology
Information Technology
Arthi
Machine Learning
Information Technology
Venkat
Embedded Systems
Electrical Communication Engineering
Varma
Internet of Things
Computer Science
Priya
Front End Developer
Information Technology
Santhosh
Back End Developer
Information Technology
History
Syntax | History
SQLite
SELECT * FROM Teacher
SQLite
SELECT * FROM Students
SQLite
UPDATE Teacher SET department="Compute
SQLite
SELECT * FROM Teacher WHERE departmen
ENG
IN
22:47
14-03-2022

ASSIGNMENT-2

Bank details

```
package com.InterestCalculator;

//Bankdetails class is used Get information  about the bank
public class BanksDetails {
   //Variable declarition for Bank details
   public String name;
   public  String ID;
   public  String IFSC;
   public  String MICRcode;
   public String ph_no;
   public String location;
   //Constructor For Bankdetails class
   public BanksDetails(String name, String ID, String IFSC, String MICRcode,
String ph_no,String location) {
       this.name = name;//Name
       this.ID = ID;
       this.IFSC = IFSC;
       this.MICRcode = MICRcode;
       this.ph_no = ph_no;
       this.location=location;
   }
   //Display Method for Bank details Attibutes
   public void GetDetials(){
       System.out.println("Bank Name:"+name);
       System.out.println("");
       System.out.println("BankID :"+ID);
       System.out.println("IFCS :"+IFSC);
       System.out.println("MICRcode :"+MICRcode);
       System.out.println("");
   }
}
```

Interest Class

```
package com.InterestCalculator;

//Interest Class that extends Bankdetials
public class Interest extends  BanksDetails{
   //Constructor For Interest Class
   public Interest(String name, String ID, String IFSC, String MICRcode, String
ph_no,String location) {
      //Super Class (Bank details) Constructor
       super(name, ID, IFSC, MICRcode, ph_no,location);

   }
   private int ploan;//Rate of Interest for personal loan
   private int hloan;//Rate of Interest for Housing loan
   private  int eloan;//Rate of Interst for Education loan
   private  int gloan;//Rate of Interest for Gold loan
   private int hyear;//Period of Time for Housing loan
   private  int pyear;//Period of Time for Personal loan
   private int eyear;//Period of time for Education loan
   private  int gyear;//Period of time for Gold Loan
   //Setter method For Interest Class
   public  void setInterest(int ploan,int hloan,int eloan,int gloan,int pyear,int
hyear,int eyear,int gyear ){
       this.ploan=ploan;
       this.eloan=eloan;
       this.hloan=hloan;
       this.gloan=gloan;
       this.pyear=pyear;
       this.hyear=hyear;
       this.gyear=gyear;
       this.eyear=eyear;
   }
   //Getter Method For Interest class
   public int getPloan() {
```

```
    return ploan;
}

public int getHloan() {
    return hloan;
}

public int getEloan() {
    return eloan;
}

public int getGloan() {
    return gloan;
}

public  int getHyear() {
    return hyear;
}

public int getPyear() {
    return pyear;
}

public int getEyear() {
    return eyear;
}

public int getGyear() {
    return gyear;
}
```

```
}
```

Calculation Class

```
package com.InterestCalculator;

//Calculation class is polymorphism class
public class Calculations {
//This method is used to calculate Personal ,Housing ,Education loan Interests
public int calculate_interest(int Principal_amount,int Rate_of_interest,int
Period_of_Time){
   int interest=(Principal_amount*Rate_of_interest*Period_of_Time)/100;
   return interest;
}
//This method is used to calculate Gold load interest
public int calculate_interest(int no_of_grams,int Rate_of_interest,int
Period_of_Time,int Cost){
   int intertest=(no_of_grams*Cost*Rate_of_interest*Period_of_Time)/100;
   return intertest;
}

}
```

Display Class

```
package com.InterestCalculator;

//Display Class
public class Display {
   //Display Method
   public  void display(String name,String phone,String Acc,String Typeofloan,int
interest){
       System.out.println("User Name: "+name);//User name
       System.out.println("Phone Number: "+phone);//Phone number
       System.out.println("Acc No: "+Acc);//Account number
```

```
        System.out.println("Typeofloan: "+Typeofloan);//Type of loan
        System.out.println("Total Interest : "+(double)interest);//Total Interest
        System.out.println("Interest per month: "+(double)interest/12);//Interest  per
month
    }
}
```

Main Class

```
package com.InterestCalculator;

import java.util.Locale;
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        //Creating Object For various Banks SBI,Indian Bank,HDFC,Axis,Karur
Vysya Bank
        Interest SBI=new Interest("State Bank of
India","192311FE11","190GT178999","11111ERT","9876451122","Bangalore");
        Interest IB=new Interest("Indian
Bank","1222FRT000","18FGTHSSSR","9088876661","8689010001","Chennai");
        Interest HDFC=new Interest("HDFC
Bank","15677QQQ","190FRTT","789112342","9856612311","Mumbai");
        Interest Axis=new
Interest("Axis","16YTRETQ","1FRTQ000","891223452","6375412311","Delhi");
        Interest KVB=new Interest("Karur Vysya
Bank","17FTQTY","187FDRT001","809877771","7891113211","Karur");

       //Setting rate of interest for personal,Education,Gold,Hosuing Loan For arious
Banks
        SBI.setInterest(6,7,5,8,15,20,5,12);
        IB.setInterest(8,7,6,4,10,15,6,12);
        HDFC.setInterest(7,8,7,9,14,16,5,12);
        Axis.setInterest(8,9,5,4,10,12,6,12);
```

```
        KVB.setInterest(5,4,3,6,9,10,5,12);
       //Scanner Class For getting user input
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the name");
        String n=sc.next();//Getting user name
        System.out.println("Enter the Account Number");
        String acc=sc.next();//Getting user Account
        System.out.println("Enter the phone Number");
        String ph=sc.next();//Getting User Phone number
        System.out.println();//Printing Empty line For space
        //Displaying Avaliable Banks
        System.out.println("Press 1 For SBI");
        System.out.println("Press 2 For Indian Bank");
        System.out.println("Press 3 For HDFC");
        System.out.println("Press 4 for Axis");
        System.out.println("Press 5 for KVB");
        System.out.println();
        System.out.println("Enter the Choice");
        int c=sc.nextInt();
        //Creating Object For Calculations classs
        Calculations s=new Calculations();
        //Creating Object For Calculation
        Display d=new Display();
        //Switch case For selecting the Bank
        switch (c) {
           case 1://SBI
              //Printing The Types of loans
              System.out.println("Enter 1 for housing loan");
              System.out.println("Enter 2 for personal loan");
              System.out.println("Enter 3 for goldloan");
              System.out.println("Enter 4 for educationloan");
              int tloan = sc.nextInt();//Selecting the loan type using the user input and
if statement
              if (tloan == 1) {
                 System.out.println("Enter The principal amount");
```

```
                int p = sc.nextInt();
                  int interest= s.calculate_interest( p,SBI.getHloan(),
SBI.getHyear());//Passing The parameters Calculation class For getting interest
                  d.display(n,ph,acc,"Housing Loan",interest);//Display userDetails
and interest

            } else if (tloan == 2) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,SBI.getPloan(), SBI.getPyear());
                d.display(n,ph,acc,"Personal Loan",interest);
            } else if (tloan == 3) {
                System.out.println("Enter The number of Grams");
                int g = sc.nextInt();
                int cost=2500;
                int interest= s.calculate_interest( g,SBI.getGloan(),
SBI.getGyear(),cost);
                d.display(n,ph,acc,"Gold Loan",interest);
            } else if (tloan == 4) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,SBI.getEloan(),SBI.getEyear());
                d.display(n,ph,acc,"Education Loan",interest);
            }
            break;
        case 2 ://Indian Bank
            System.out.println("Enter 1 for housing loan");
            System.out.println("Enter 2 for personal loan");
            System.out.println("Enter 3 for goldloan");
            System.out.println("Enter 4 for educationloan");
            int tloan1 = sc.nextInt();
            if (tloan1 == 1) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,IB.getHloan(), IB.getHyear());
```

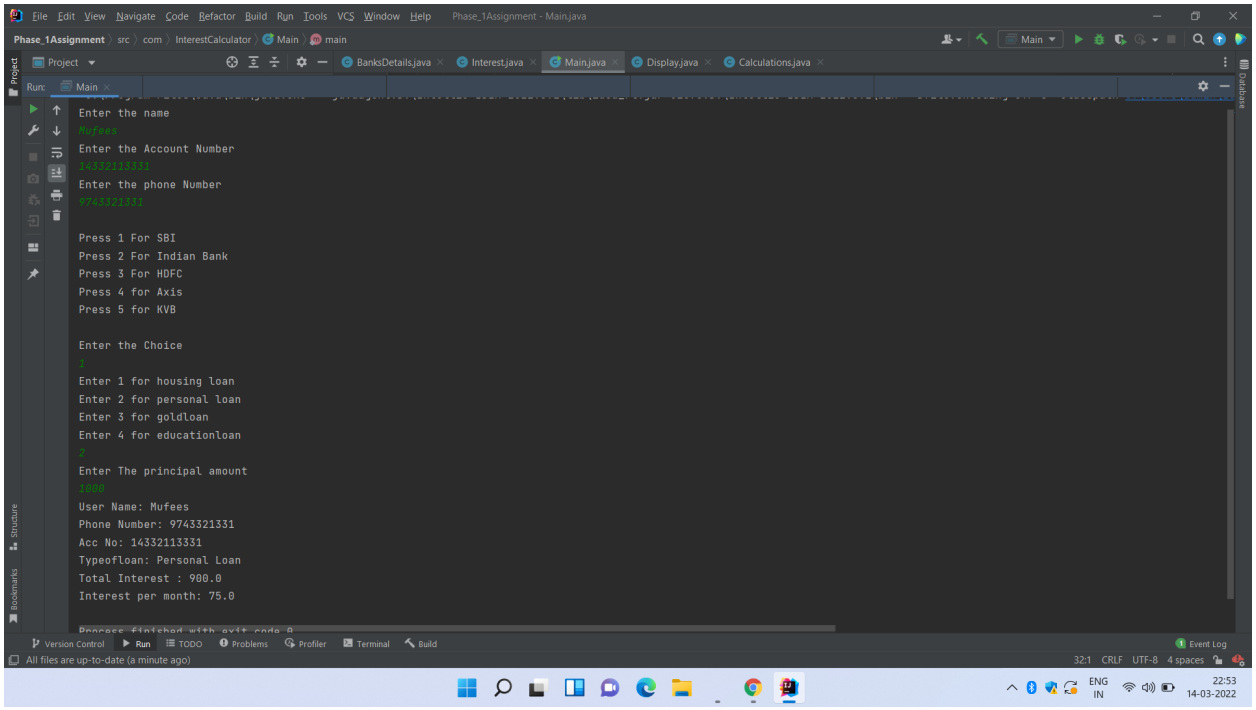
```
                d.display(n,ph,acc,"Housing Loan",interest);
            } else if (tloan1 == 2) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,IB.getPloan(), IB.getPyear());
                d.display(n,ph,acc,"Personal Loan",interest);
            } else if (tloan1 == 3) {

                System.out.println("Enter The number of Grams");
                int g = sc.nextInt();
                int cost=2500;
                int interest= s.calculate_interest( g,IB.getGloan(), IB.getGyear(),c);
                d.display(n,ph,acc,"Gold Loan",interest);
            } else if (tloan1 == 4) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,IB.getEloan(),IB.getEyear());
                d.display(n,ph,acc,"Education Loan",interest);
            }
            break;
        case 3 ://HDFC
            System.out.println("Enter 1 for housing loan");
            System.out.println("Enter 2 for personal loan");
            System.out.println("Enter 3 for goldloan");
            System.out.println("Enter 4 for educationloan");
            int tloan2 = sc.nextInt();
            if (tloan2 == 1) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,HDFC.getHloan(),
HDFC.getHyear());
                d.display(n,ph,acc,"Housing Loan",interest);
            } else if (tloan2 == 2) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
```

```
                int interest= s.calculate_interest( p,HDFC.getPloan(),
HDFC.getPyear());
                d.display(n,ph,acc,"Personal Loan",interest);
            } else if (tloan2 == 3) {

                System.out.println("Enter The number of Grams");
                int g = sc.nextInt();
                int cost=2500;
                int interest= s.calculate_interest( g,HDFC.getGloan(),
HDFC.getGyear(),c);
                d.display(n,ph,acc,"Gold Loan",interest);
            } else if (tloan2 == 4) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,HDFC.getEloan(),
HDFC.getEyear());
                d.display(n,ph,acc,"Education Loan",interest);
            }
            break;

        case 4://Axis

            System.out.println("Enter 1 for housing loan");
            System.out.println("Enter 2 for personal loan");
            System.out.println("Enter 3 for goldloan");
            System.out.println("Enter 4 for educationloan");
            int tloan3 = sc.nextInt();
            if (tloan3 == 1) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,Axis.getHloan(), Axis.getHyear());
                d.display(n,ph,acc,"Housing Loan",interest);
            } else if (tloan3 == 2) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
```

```
                int interest= s.calculate_interest( p,Axis.getPloan(), Axis.getPyear());
                d.display(n,ph,acc,"Personal Loan",interest);
            } else if (tloan3 == 3) {

                System.out.println("Enter The number of Grams");
                int g = sc.nextInt();
                 int cost=2500;
                int interest= s.calculate_interest( g,Axis.getGloan(),
Axis.getGyear(),cost);
                d.display(n,ph,acc,"Gold Loan",interest);
            } else if (tloan3 == 4) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,Axis.getEloan(), Axis.getEyear());
                d.display(n,ph,acc,"Education Loan",interest);
            }
            break;
        case 5://KVB
            System.out.println("Enter 1 for housing loan");
            System.out.println("Enter 2 for personal loan");
            System.out.println("Enter 3 for goldloan");
            System.out.println("Enter 4 for educationloan");
            int tloan4 = sc.nextInt();
            if (tloan4 == 1) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,KVB.getHloan(),
KVB.getHyear());
                d.display(n,ph,acc,"Housing Loan",interest);
            } else if (tloan4 == 2) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,KVB.getPloan(), KVB.getPyear());
                d.display(n,ph,acc,"Personal Loan",interest);
             } else if (tloan4 == 3) {
```

```
                System.out.println("Enter The number of Grams");
                int g = sc.nextInt();
                int cost=2500;
                int interest= s.calculate_interest( g,KVB.getGloan(),
KVB.getGyear());
                d.display(n,ph,acc,"Gold Loan",interest);
            } else if (tloan4 == 4) {
                System.out.println("Enter The principal amount");
                int p = sc.nextInt();
                int interest= s.calculate_interest( p,KVB.getEloan(), KVB.getEyear());
                d.display(n,ph,acc,"Housing Loan",interest);
            }
              break;
            }

        }

        }
```

Output


Enter the name
Mufees
Enter the Account Number
14332113331
Enter the phone Number
9743321331
Press 1 For SBI
Press 2 For Indian Bank
Press 3 For HDFC
Press 4 for Axis
Press 5 for KVB
Enter the Choice
1
Enter 1 for housing loan
Enter 2 for personal loan
Enter 3 for goldloan
Enter 4 for educationloan
2
Enter The principal amount
1000
User Name: Mufees
Phone Number: 9743321331
Acc No: 14332113331
Typeofloan: Personal Loan
Total Interest : 900.0
Interest per month: 75.0