JAVA AWT BASED-Iris Based Age Classification system - SQL CONNECTIVITY USING JDBC

A
Report
Submitted in partial fulfillment of the
Requirements for the award of the Degree of

BE IV SEMESTER DATABASE MANAGEMENT SYSTEMLAB

INFORMATION TECHNOLOGY

By

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2020

BONAFIDE CERTIFICATE

This to Certify that the project report titled "**Iris Based Age Classification system**" is the bonafied mini project work of **Mr. S. Sai Rohith** bearing Roll.no:**1602-18-737-098** who carried out this project under the Guidance of **B.Leelavathy** during IV semester B.E for the academic year 2019-2020.

external examiner ***internal examiner***

B.LEELAVATHY
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Department of Information Technology

AIM AND PRIORITY OF THE PROJECT:

To create a GUI based form for the project of **Iris Based Age Classification system** where in a person age can be known by scaning his eye. The values entered (insertion, updation, deletion)by the user for respective table in GUI should be updated in the database using JDBC.

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1.Abstract:

The average human eyeball is about one inch (25.4mm)in diameter, and weighs 0.25ounces (7.09gram). This is just slightly smaller than a regulation ping pong ball. The human iris ranges from 10.2mm to 13.0mm on average. by this diameter and range of vision we can find the age of the person if this values are collected from a healthy uninjured person.if we consider ratio of range of vision and retina diameter then it will decrease with the increase in the age."Age measurement is very difficult," says Dr Thomas Huang, the lead developer. "If you use the face to estimate age we can really get the apparent age, or how old a person looks."The researchers trained their computer algorithm using 1,600 different people with five pictures of each person, for a total of 8,000 images. The age of the people in the pictures ranged from one year to 93 years old.so by their research they have given ranges of retina_ratio and age of people with that ratio. with the help of that ratio this project is based on. with the help of that segeration we are going to estimate the age of people using this software.

2.INTRODUCTION

- **REQUIREMENTS FOR IRIS BASED AGE CLASSIFICATION SYSTEM:**

REQUIREMENT ANALYSIS

List of tables :

- COMPANY
- RETINA_SCANNER
- RETINA_SCANNER_PREPAREDBY
- SCAN
- PERSON
- REPORT

List of attributes with their domain types:

1. Company:

   Company_id : number()

Name : varchar()

Address : varchar()

Rating : number()

2. Retina_scanner:

   Scanner_id : number

   Name : varchar()

   Cost : number

   Accuracy : number

3. Prepared_by:

   Scanner_id : number

   Company_id : number

   Day : date

4. Person:

   Person_id : number

   Name : varchar()

   Phone_no : number(10)

   Address : varchar()

5. Scan:

   Person_id : number

Scanner_id : number

Report_id : number

6. Report :

Report_id : number

Person_id : number

Age : number

Colour : varchar()

Retina_ratio : number

- **SPECIFIC GOAL OF THE PROJECT:**

  The main goal to be achieved through this project was to provide a facility to classify people by their age without knowing their age from them. This is done with the help of their retina size. People who uses this application can konw their age with the help of their retina size.

  The project also ensure that the details of the people are confidential and are stored in the database.

➢ Architecture and technology used:

Java Eclipse, Oracle 11g Database, java SE version 8, SQL *plus ,java AWT.

Eclipse: It is an integrated development environment (IDE) used in computer programming. It contains a base workspace and an extensible plug in system for customizing the environment. The Eclipse software development kit (SDK), which include java development tools is meant for java developers.

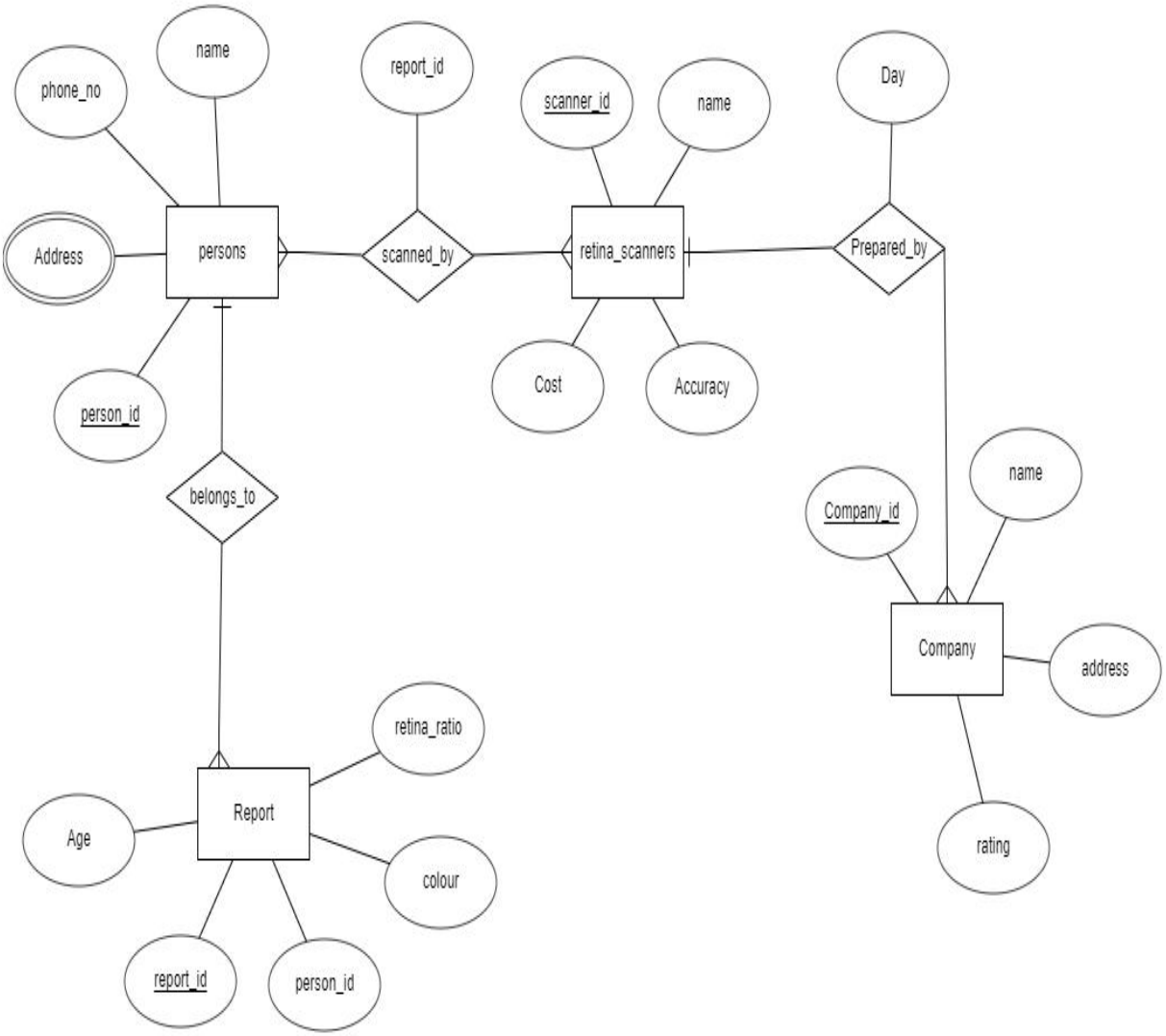
SQL *plus: SQL *plus is a command line tool proprietary to oracle. You can send SQL Queries to the server using the tool. It can also help you format the result of query. SQL is the query language that is used to communicate with the oracle server to access and modify data.

JAVA AWT: Abstract window tool kit is an API to develop GUI or Window based applications in java. Java AWT components are platform dependent i.e components are displayed according to the view of operating system. AWT is heavy weight that is components are using the resources of O.S.

JDBC: Java Database Connectivity is an application programming interface (API) for the programming language java , which defines how a client may access database. It is a java based data access technology used for java database connectivity. It is the part of java Standard Edition Platform, from oracle corporation.

➢ DESIGN:

i)ER Diagram of this project :



MAPPING CARDINALITIES AND PARTICIPATION CONSTRAINTS:

A company can prepare many retina scanners with different costs and different accuracy. But each retina scanner can be prepared by only one specific company only.

A person can be scan his eye any number of times with different scanners to know his age and generate many number of reports I.e., different report for each scan.

But a each report is belongs to only one person. That is person may repeat but report id should not repeat again.

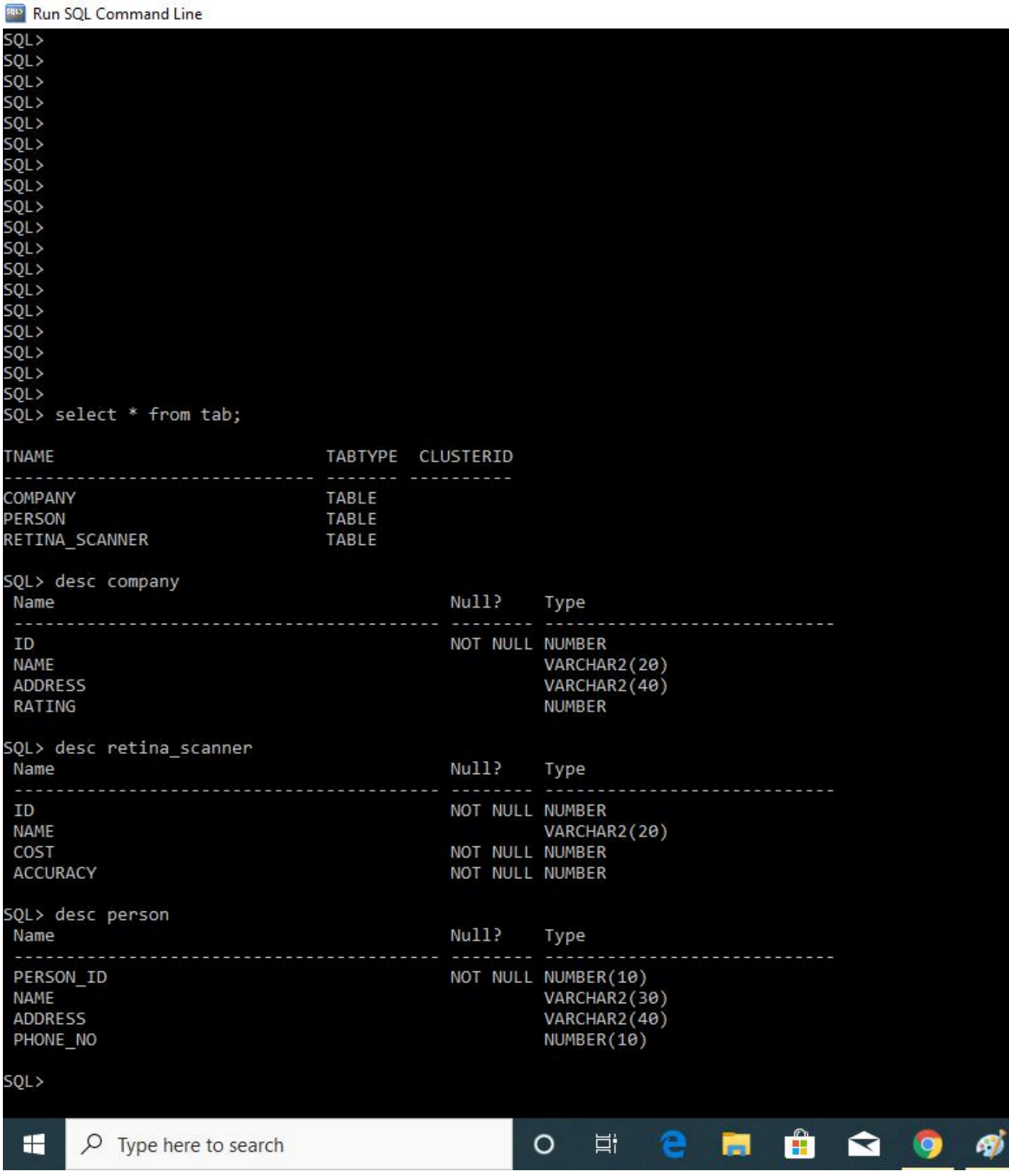
Address attribute in person table is multi variable attribute and all id's in each table are primary keys.

3.DDL Commands:

i) Creating all the required tables.

ii) Enforcing constraints to primary, forein key constraints.

DBMS ASSIGNMENT -2
Title: Iris based age classification system



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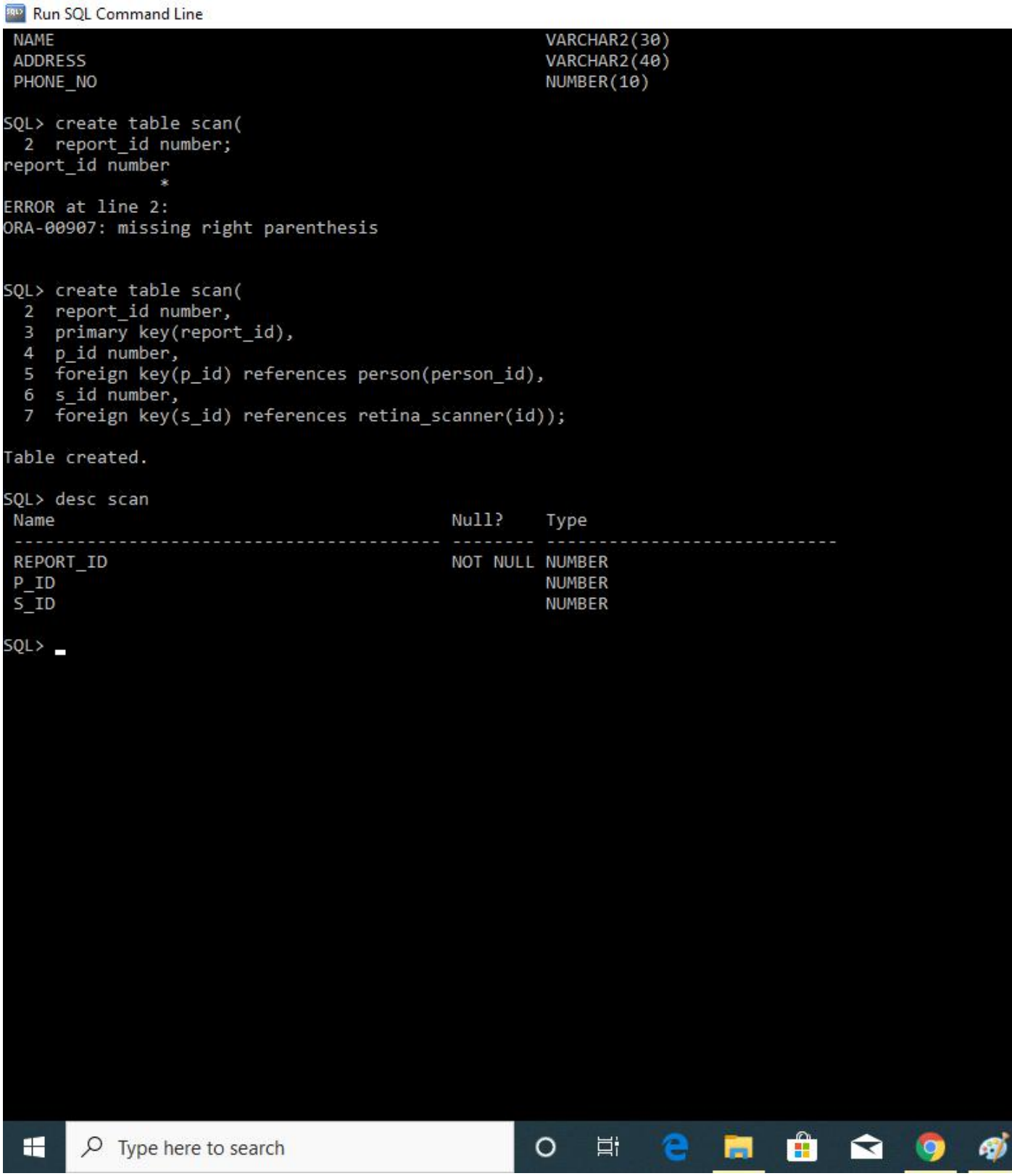

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Run SQL Command Line

```
  3  primary key(report_id),
  4  p_id number,
  5  foreign key(p_id) references person(person_id),
  6  s_id number,
  7  foreign key(s_id) references retina_scanner(id));

Table created.

SQL> desc scan
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 REPORT_ID                                 NOT NULL NUMBER
 P_ID                                               NUMBER
 S_ID                                               NUMBER

SQL> insert into scan values(13,14,15);
insert into scan values(13,14,15)
*
ERROR at line 1:
ORA-02291: integrity constraint (ASSINGMENT.SYS_C007037) violated - parent key
not found


SQL> select * from tab;

TNAME                          TABTYPE  CLUSTERID
------------------------------ ------- ----------
COMPANY                        TABLE
PERSON                         TABLE
RETINA_SCANNER                 TABLE
SCAN                           TABLE

SQL> create table prepared_by(
  2  day date,
  3  s_id number,
  4  c_id number,
  5  foreign key(s_id) references retina_scanner(id));

Table created.

SQL> alter table prepared_by add(foreign key(c_id) references company(id));

Table altered.

SQL> desc prepared_by
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DAY                                                DATE
 S_ID                                               NUMBER
 C_ID                                               NUMBER

SQL>
```

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DBMS ASSIGNMENT -2
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Run SQL Command Line

```
ORA-02291: integrity constraint (ASSINGMENT.SYS_C007037) violated - parent key
not found


SQL> select * from tab;

TNAME                          TABTYPE  CLUSTERID
------------------------------ ------- ----------
COMPANY                        TABLE
PERSON                         TABLE
RETINA_SCANNER                 TABLE
SCAN                           TABLE

SQL> create table prepared_by(
  2  day date,
  3  s_id number,
  4  c_id number,
  5  foreign key(s_id) references retina_scanner(id));

Table created.

SQL> alter table prepared_by add(foreign key(c_id) references company(id));

Table altered.

SQL> desc prepared_by
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DAY                                                DATE
 S_ID                                               NUMBER
 C_ID                                               NUMBER

SQL> create table report(
  2  r_id number primary key,
  3  colour varchar2(20),
  4  retina_ratio number,
  5  age number,
  6  person_id  number,
  7  foreign key(person_id) references person(person_id));

Table created.

SQL> desc report
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 R_ID                                      NOT NULL NUMBER
 COLOUR                                             VARCHAR2(20)
 RETINA_RATIO                                       NUMBER
 AGE                                                NUMBER
 PERSON_ID                                          NUMBER

SQL>
```

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Run SQL Command Line

```
SQL>
SQL> select * from tab;

TNAME                          TABTYPE  CLUSTERID
------------------------------ ------- ----------
COMPANY                        TABLE
PERSON                         TABLE
PREPARED_BY                    TABLE
REPORT                         TABLE
RETINA_SCANNER                 TABLE
SCAN                           TABLE

6 rows selected.

SQL> desc company
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ID                                        NOT NULL NUMBER
 NAME                                               VARCHAR2(20)
 ADDRESS                                            VARCHAR2(40)
 RATING                                             NUMBER

SQL> desc person
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 PERSON_ID                                 NOT NULL NUMBER(10)
 NAME                                               VARCHAR2(30)
 ADDRESS                                            VARCHAR2(40)
 PHONE_NO                                           NUMBER(10)

SQL> desc prepered_by
ERROR:
ORA-04043: object prepered_by does not exist


SQL> desc prepared_by
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DAY                                                DATE
 S_ID                                               NUMBER
 C_ID                                               NUMBER

SQL> desc report
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 R_ID                                      NOT NULL NUMBER
 COLOUR                                             VARCHAR2(20)
 RETINA_RATIO                                       NUMBER
 AGE                                                NUMBER
 PERSON_ID                                          NUMBER

SQL> desc retina_canner
```

Type here to search

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DBMS ASSIGNMENT -2
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Run SQL Command Line

```
SQL> desc retina_canner
ERROR:
ORA-04043: object retina_canner does not exist


SQL> desc retina_scanner
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ID                                        NOT NULL NUMBER
 NAME                                               VARCHAR2(20)
 COST                                      NOT NULL NUMBER
 ACCURACY                                  NOT NULL NUMBER

SQL> desc scan
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 REPORT_ID                                 NOT NULL NUMBER
 P_ID                                               NUMBER
 S_ID                                               NUMBER

SQL>
```

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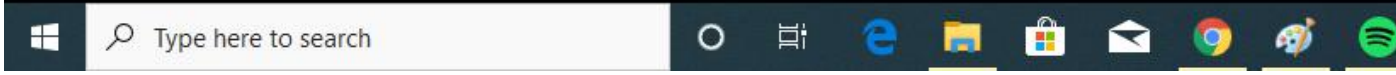
DBMS ASSIGNMENT -2
Title: Iris based age classification system

Run SQL Command Line

```
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 REPORT_ID                                 NOT NULL NUMBER
 P_ID                                               NUMBER
 S_ID                                               NUMBER

SQL>
SQL> alter table company add constraint ck_rating check(rating between 0 and 100);

Table altered.

SQL> desc company
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ID                                        NOT NULL NUMBER
 NAME                                               VARCHAR2(20)
 ADDRESS                                            VARCHAR2(40)
 RATING                                             NUMBER

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 1
Enter value for name: sai
Enter value for address:
Enter value for phone_no: 1
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(1,'sai','',1)

1 row created.

SQL> delete from person
  2  ;

1 row deleted.

SQL> alter table person add constraint ck_phone_no check(phone_no between 1000000000 and 9999999999);

Table altered.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 1
Enter value for name: sai
Enter value for address: abc
Enter value for phone_no: 567
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(1,'sai','abc',567)
insert into person values(1,'sai','abc',567)
*
ERROR at line 1:
ORA-02290: check constraint (ASSINGMENT.CK_PHONE_NO) violated


SQL>
```



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DBMS ASSIGNMENT -2
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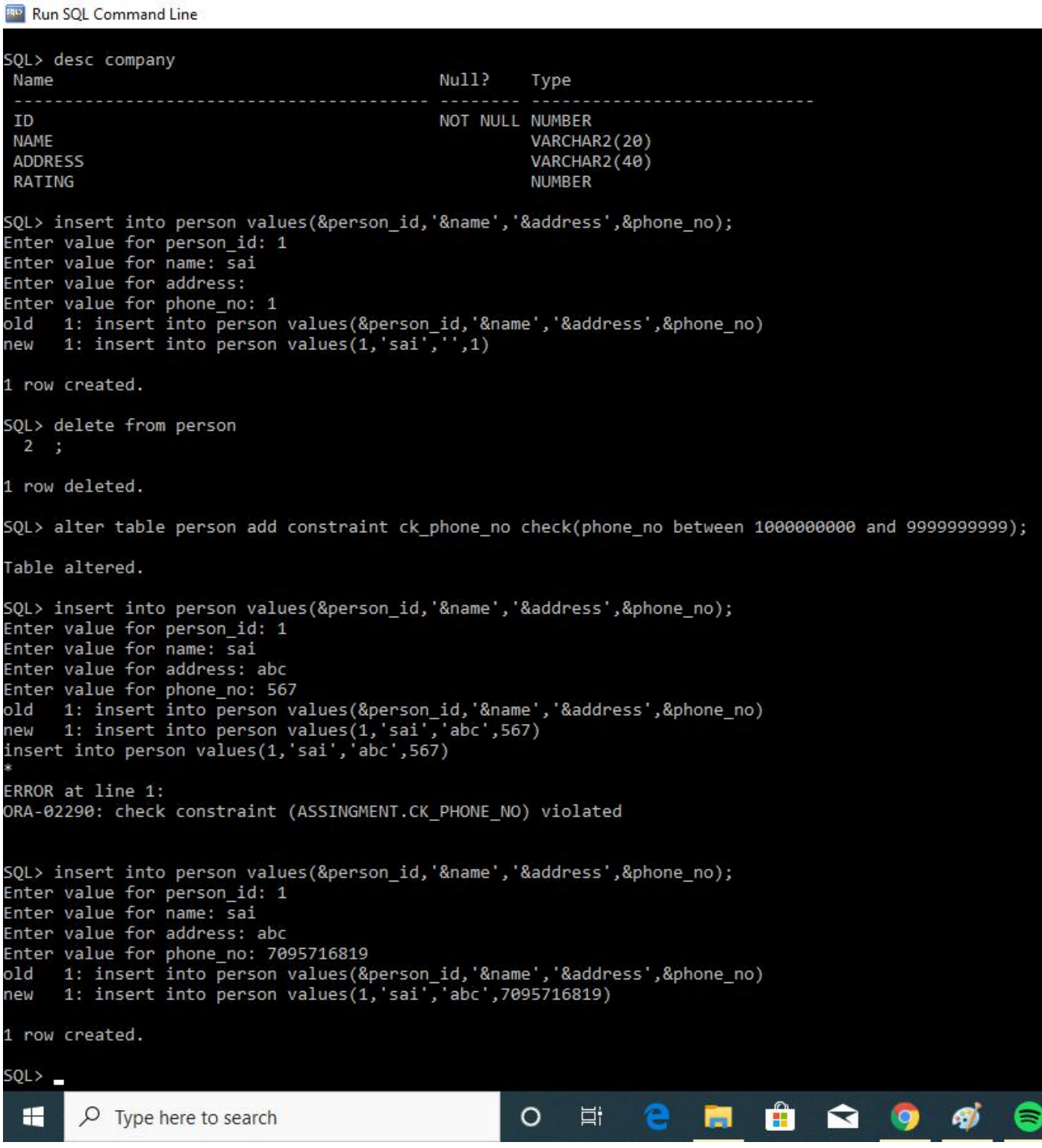

Name : S.Sai Rohith Roll Number : 1602-18-737-098

DBMS ASSIGNMENT -2
Title: Iris based age classification system

Run SQL Command Line

```
SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 1
Enter value for name: sai
Enter value for address: abc
Enter value for phone_no: 7095716819
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(1,'sai','abc',7095716819)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 99
Enter value for name: sampath
Enter value for address: dvk
Enter value for phone_no: 9381321423
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(99,'sampath','dvk',9381321423)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 100
Enter value for name: vignesh
Enter value for address: sathupally
Enter value for phone_no: 9505673198
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(100,'vignesh','sathupally',9505673198)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 101
Enter value for name: susheel
Enter value for address: attapur
Enter value for phone_no: 9121497115
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(101,'susheel','attapur',9121497115)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 102
Enter value for name: samson
Enter value for address: hanamkonda
Enter value for phone_no: 9505663097
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(102,'samson','hanamkonda',9505663097)

1 row created.

SQL>
```

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Run SQL Command Line

```
new   1: insert into person values(100,'vignesh','sathupally',9505673198)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 101
Enter value for name: susheel
Enter value for address: attapur
Enter value for phone_no: 9121497115
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(101,'susheel','attapur',9121497115)

1 row created.

SQL> insert into person values(&person_id,'&name','&address',&phone_no);
Enter value for person_id: 102
Enter value for name: samson
Enter value for address: hanamkonda
Enter value for phone_no: 9505663097
old   1: insert into person values(&person_id,'&name','&address',&phone_no)
new   1: insert into person values(102,'samson','hanamkonda',9505663097)

1 row created.

SQL> select * from person;

 PERSON_ID NAME
---------- ------------------------------
ADDRESS                                  PHONE_NO
---------------------------------------- ----------
         1 sai
abc                                      7095716819

        99 sampath
dvk                                      9381321423

       100 vignesh
sathupally                               9505673198


 PERSON_ID NAME
---------- ------------------------------
ADDRESS                                  PHONE_NO
---------------------------------------- ----------
       101 susheel
attapur                                  9121497115

       102 samson
hanamkonda                               9505663097


SQL> '
```

DBMS ASSIGNMENT -2
Title: Iris based age classification system

Run SQL Command Line

```
SQL> '
SP2-0042: unknown command "'" - rest of line ignored.
SQL> desc company
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ID                                        NOT NULL NUMBER
 NAME                                               VARCHAR2(20)
 ADDRESS                                            VARCHAR2(40)
 RATING                                             NUMBER

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1001
Enter value for name: iris id
Enter value for address: united states
Enter value for rating: 95
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1001,'iris id','united states',95)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1001
Enter value for name: cmi tech
Enter value for address: korea
Enter value for rating: 90
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1001,'cmi tech','korea',90)
insert into company values(1001,'cmi tech','korea',90)
*
ERROR at line 1:
ORA-00001: unique constraint (ASSINGMENT.SYS_C007021) violated


SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: cmi tech
Enter value for address: korea
Enter value for rating: 900
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1002,'cmi tech','korea',900)
insert into company values(1002,'cmi tech','korea',900)
*
ERROR at line 1:
ORA-02290: check constraint (ASSINGMENT.CK_RATING) violated


SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: korea
Enter value for address: 2
Enter value for rating: a
old   1: insert into company values(&id,'&name','&address',&rating)
```

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DBMS ASSIGNMENT -2
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Run SQL Command Line

```
SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: korea
Enter value for address: 2
Enter value for rating: a
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1002,'korea','2',a)
insert into company values(1002,'korea','2',a)
                                            *
ERROR at line 1:
ORA-00984: column not allowed here


SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: cmi tech
Enter value for address: korea
Enter value for rating: 90
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1002,'cmi tech','korea',90)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1003
Enter value for name: princeton identity
Enter value for address: united states
Enter value for rating: 85
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1003,'princeton identity','united states',85)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1004
Enter value for name: sensor tech
Enter value for address: united kingdom
Enter value for rating: 80
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1004,'sensor tech','united kingdom',80)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1005
Enter value for name: argus
Enter value for address: united kingdom
Enter value for rating: 85
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1005,'argus','united kingdom',85)

1 row created.
```

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Run SQL Command Line

```
SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: korea
Enter value for address: 2
Enter value for rating: a
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1002,'korea','2',a)
insert into company values(1002,'korea','2',a)
                                            *
ERROR at line 1:
ORA-00984: column not allowed here


SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1002
Enter value for name: cmi tech
Enter value for address: korea
Enter value for rating: 90
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1002,'cmi tech','korea',90)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1003
Enter value for name: princeton identity
Enter value for address: united states
Enter value for rating: 85
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1003,'princeton identity','united states',85)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1004
Enter value for name: sensor tech
Enter value for address: united kingdom
Enter value for rating: 80
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1004,'sensor tech','united kingdom',80)

1 row created.

SQL> insert into company values(&id,'&name','&address',&rating);
Enter value for id: 1005
Enter value for name: argus
Enter value for address: united kingdom
Enter value for rating: 85
old   1: insert into company values(&id,'&name','&address',&rating)
new   1: insert into company values(1005,'argus','united kingdom',85)

1 row created.
```

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Run SQL Command Line

```
SQL> select * from company;

        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1001 iris id              united states
        95

      1002 cmi tech             korea
        90

      1003 princeton identity   united states
        85


        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1004 sensor tech          united kingdom
        80

      1005 argus                united kingdom
        85


SQL>
```

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Run SQL Command Line

```
SQL> insert into retina_scanner values(&id,'&name',&cost,&accuracy);
Enter value for id: 1
Enter value for name: iritech
Enter value for cost: 7500
Enter value for accuracy: 90
old   1: insert into retina_scanner values(&id,'&name',&cost,&accuracy)
new   1: insert into retina_scanner values(1,'iritech',7500,90)

1 row created.

SQL> insert into retina_scanner values(&id,'&name',&cost,&accuracy);
Enter value for id: 2
Enter value for name: inddus
Enter value for cost: 4000
Enter value for accuracy: 70
old   1: insert into retina_scanner values(&id,'&name',&cost,&accuracy)
new   1: insert into retina_scanner values(2,'inddus',4000,70)

1 row created.

SQL> insert into retina_scanner values(&id,'&name',&cost,&accuracy);
Enter value for id: 3
Enter value for name: cis202
Enter value for cost: 16500
Enter value for accuracy: 95
old   1: insert into retina_scanner values(&id,'&name',&cost,&accuracy)
new   1: insert into retina_scanner values(3,'cis202',16500,95)

1 row created.

SQL> insert into retina_scanner values(&id,'&name',&cost,&accuracy);
Enter value for id: 4
Enter value for name: mis_iris
Enter value for cost: 4500
Enter value for accuracy: 75
old   1: insert into retina_scanner values(&id,'&name',&cost,&accuracy)
new   1: insert into retina_scanner values(4,'mis_iris',4500,75)

1 row created.

SQL> insert into retina_scanner values(&id,'&name',&cost,&accuracy);
Enter value for id: 5
Enter value for name: ir_scan
Enter value for cost: 24000
Enter value for accuracy: 98
old   1: insert into retina_scanner values(&id,'&name',&cost,&accuracy)
new   1: insert into retina_scanner values(5,'ir_scan',24000,98)

1 row created.

SQL>
```


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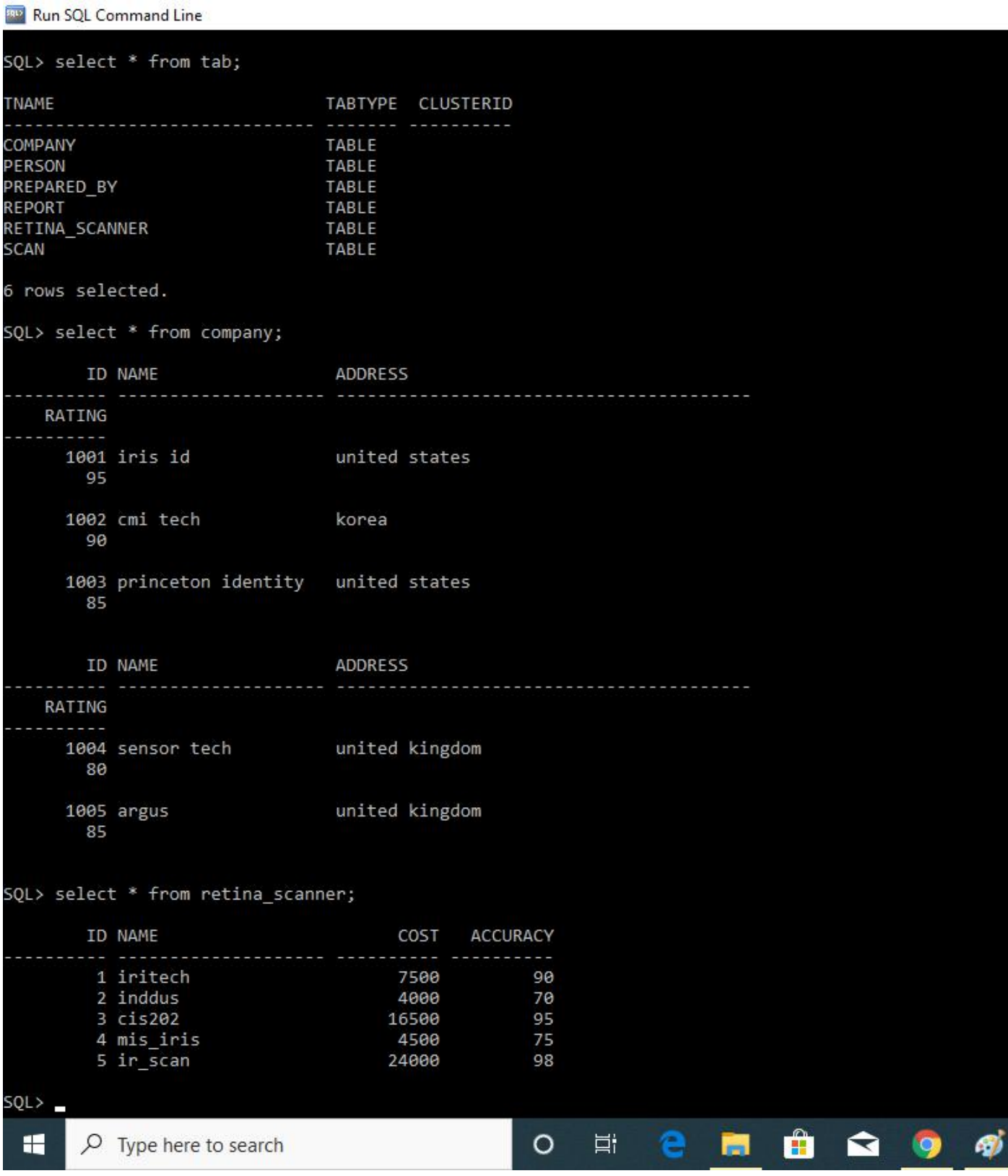
DBMS ASSIGNMENT -2
Title: Iris based age classification system



Name : S.Sai Rohith Roll Number : 1602-18-737-098

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Title: Iris based age classification system

Run SQL Command Line

```
insert into prepared_by values('',1,103)
*
ERROR at line 1:
ORA-02291: integrity constraint (ASSINGMENT.SYS_C007039) violated - parent key
not found


SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 1
Enter value for c_id: 1003
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',1,1003)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 2
Enter value for c_id: 1004
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',2,1004)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 3
Enter value for c_id: 1002
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',3,1002)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 4
Enter value for c_id: 1005
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',4,1005)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 5
Enter value for c_id: 1001
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',5,1001)

1 row created.
```

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```
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',1,1003)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 2
Enter value for c_id: 1004
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',2,1004)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 3
Enter value for c_id: 1002
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',3,1002)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 4
Enter value for c_id: 1005
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',4,1005)

1 row created.

SQL> insert into prepared_by values('&date',&s_id,&c_id);
Enter value for date:
Enter value for s_id: 5
Enter value for c_id: 1001
old   1: insert into prepared_by values('&date',&s_id,&c_id)
new   1: insert into prepared_by values('',5,1001)

1 row created.

SQL> select * from prepared_by;

DAY             S_ID       C_ID
--------- ---------- ----------
                  1       1003
                  2       1004
                  3       1002
                  4       1005
                  5       1001

SQL>
```

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Run SQL Command Line

```
old   1: insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id)
new   1: insert into report values(2003,'blue',2.20,2,)
insert into report values(2003,'blue',2.20,2,)
                                           *
ERROR at line 1:
ORA-00936: missing expression


SQL> insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id);
Enter value for r_id: 2003
Enter value for colour: blue
Enter value for retina_ratio: 2.20
Enter value for age: 20
Enter value for person_id: 100
old   1: insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id)
new   1: insert into report values(2003,'blue',2.20,20,100)

1 row created.

SQL> insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id);
Enter value for r_id: 2004
Enter value for colour: brown
Enter value for retina_ratio: 2.2065
Enter value for age: 21
Enter value for person_id: 101
old   1: insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id)
new   1: insert into report values(2004,'brown',2.2065,21,101)

1 row created.

SQL> insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id);
Enter value for r_id: 2005
Enter value for colour: gray
Enter value for retina_ratio: 2.215
Enter value for age: 19
Enter value for person_id: 102
old   1: insert into report values(&r_id,'&colour',&retina_ratio,&age,&person_id)
new   1: insert into report values(2005,'gray',2.215,19,102)

1 row created.

SQL> select * from report;

      R_ID COLOUR               RETINA_RATIO        AGE  PERSON_ID
---------- -------------------- ------------ ---------- ----------
      2001 black                        2.25         18          1
      2002 brown                        2.25         18         99
      2003 blue                          2.2         20        100
      2004 brown                      2.2065         21        101
      2005 gray                        2.215         19        102

SQL>
```


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Run SQL Command Line

```
SQL> select * from tab;

TNAME                          TABTYPE  CLUSTERID
------------------------------ ------- ----------
COMPANY                        TABLE
PERSON                         TABLE
PREPARED_BY                    TABLE
REPORT                         TABLE
RETINA_SCANNER                 TABLE
SCAN                           TABLE

6 rows selected.

SQL> select * from company;

        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1001 iris id              united states
        95

      1002 cmi tech             korea
        90

      1003 princeton identity   united states
        85


        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1004 sensor tech          united kingdom
        80

      1005 argus                united kingdom
        85


SQL> select * from person;

 PERSON_ID NAME
---------- ------------------------------
ADDRESS                                  PHONE_NO
---------------------------------------- ----------
         1 sai
abc                                      7095716819

        99 sampath
dvk                                      9381321423
```

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Run SQL Command Line

```
SQL> select * from person;

 PERSON_ID NAME
---------- ------------------------------
ADDRESS                                  PHONE_NO
---------------------------------------- ----------
         1 sai
abc                                      7095716819

        99 sampath
dvk                                      9381321423

       100 vignesh
sathupally                               9505673198


 PERSON_ID NAME
---------- ------------------------------
ADDRESS                                  PHONE_NO
---------------------------------------- ----------
       101 susheel
attapur                                  9121497115

       102 samson
hanamkonda                               9505663097


SQL> select * from prepared_by;

DAY             S_ID       C_ID
--------- ---------- ----------
                  1       1003
                  2       1004
                  3       1002
                  4       1005
                  5       1001

SQL> select * from report;

      R_ID COLOUR               RETINA_RATIO        AGE  PERSON_ID
---------- -------------------- ------------ ---------- ----------
      2001 black                        2.25         18          1
      2002 brown                        2.25         18         99
      2003 blue                          2.2         20        100
      2004 brown                      2.2065         21        101
      2005 gray                        2.215         19        102

SQL> select * from retina_scanner;

        ID NAME                      COST   ACCURACY
---------- -------------------- ---------- ----------
         1 iritech                    7500         90
```

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Run SQL Command Line

```
SQL> select * from retina_scanner;

        ID NAME                      COST   ACCURACY
---------- -------------------- ---------- ----------
         1 iritech                    7500         90
         2 inddus                     4000         70
         3 cis202                    16500         95
         4 mis_iris                   4500         75
         5 ir_scan                   24000         98

SQL> select * from scan;

 REPORT_ID       P_ID       S_ID
---------- ---------- ----------
         1          1          1
         2         99          3
         3        100          4
         5        101          2
         4        102          5

SQL>
```

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4. Implementation

Front end programs:

1)Insert a Company:

```
package company;

import java.awt.*;
import java.awt.event.*;
import java.sql.*;

import javax.swing.JOptionPane;
public class AddCompany extends Panel
{
	Button AddCompanyButton;
	TextField sidText, snameText, ratingText, addressText;
	TextArea errorText;
	Connection connection;
	Statement statement;
	public AddCompany()
	{
		try
		{
			Class.forName("oracle.jdbc.driver.OracleDriver");
		}
		catch (Exception e)
		{
			System.err.println("Unable to find and load
driver");
			System.exit(1);
		}
```

```
            connectToDB();

        }

        public void connectToDB()
        {
            try
            {
                                                connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:
xe","assingment","vasavi");
                statement = connection.createStatement();
                statement.executeUpdate("commit");

            }
            catch (SQLException connectException)
            {
                System.out.println(connectException.getMessage());

System.out.println(connectException.getSQLState());

System.out.println(connectException.getErrorCode());
                System.exit(1);
            }
        }
        public void buildGUI()
        {
            //Handle Insert Account Button
            AddCompanyButton = new Button("Add Company");
            AddCompanyButton.addActionListener(new
ActionListener()
            {
                public void actionPerformed(ActionEvent e)
                {
                    try
```

```
                    {

        if(Integer.getInteger(sidText.getText())==null)
                                throw                    new
NumberFormatException();

//Double.getDouble(ratingText.getText());
                        //String query = "INSERT INTO company
(ID,NAME,Address,RATING)  VALUES  (2,'sai  rohith','abc
colony',20)";
                         String query= "INSERT INTO company
VALUES(" + sidText.getText() + ", " + "'" + snameText.getText() +
"','" + addressText.getText() + "'," + ratingText.getText() + ")";
                        int i = statement.executeUpdate(query);
                        statement.executeUpdate("commit");
                          errorText.append("\nInserted " + i + "
rows successfully");
                    }
                    catch (SQLException insertException)
                    {
                       displaySQLErrors(insertException);
                    }
                    catch(Exception ex)
                    {
                          JOptionPane.showMessageDialog(null,
"sid should be only a number");
                    }
                }
            });
            sidText=new TextField(15);
            snameText = new TextField(15);
            ratingText = new TextField(15);
            addressText = new TextField(15);
```

```
        errorText = new TextArea(10, 40);
        errorText.setEditable(false);

        Panel first = new Panel();
        first.setLayout(new GridLayout(4, 2));
        first.add(new Label("Company ID:"));
        first.add(sidText);
        first.add(new Label("Name:"));
        first.add(snameText);
        first.add(new Label("Rating:"));
        first.add(ratingText);
        first.add(new Label("Address:"));
        first.add(addressText);
        first.setBounds(125,90,200,100);

        Panel second = new Panel(new GridLayout(4, 1));
        second.add(AddCompanyButton);
      second.setBounds(125,220,150,100);

        Panel third = new Panel();
        third.add(errorText);
        third.setBounds(125,320,300,200);

        setLayout(null);

        add(first);
        add(second);
        add(third);
        setSize(500, 600);
        setVisible(true);
        System.out.println("hello");
    }
```

```
        private void displaySQLErrors(SQLException e)
        {
                errorText.append("\nSQLException: " + e.getMessage()
+ "\n");
                errorText.append("SQLState:          " + e.getSQLState()
+ "\n");
                errorText.append("VendorError:     " + e.getErrorCode()
+ "\n");
        }
}
```

2)Update a Company:

```
package company;


import java.awt.*;
import java.awt.event.*;
import java.sql.*;
public class UpdateCompany extends Panel
{
        Button updateCompanyButton;
        List companyIDList;
```

```
TextField sidText, snameText, ratingText, addressText;
TextArea errorText;
Connection connection;
Statement statement;
ResultSet rs;

public UpdateCompany()
{
    try
    {

Class.forName("oracle.jdbc.driver.OracleDriver");
    }
    catch (Exception e)
    {
        System.err.println("Unable to find and load driver");
        System.exit(1);
    }
    connectToDB();
}
```

```
public void connectToDB()
{
    try
    {
                                        connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:
xe","assingment","vasavi");
        statement = connection.createStatement();

    }
    catch (SQLException connectException)
    {
        System.out.println(connectException.getMessage());

System.out.println(connectException.getSQLState());

System.out.println(connectException.getErrorCode());
        System.exit(1);
    }
}
```

```
    public void loadCcompanies()
    {
        try
        {
            companyIDList.removeAll();
          rs = statement.executeQuery("SELECT ID FROM
company");
            while (rs.next())
            {
                companyIDList.add(rs.getString("ID"));
            }
        }
        catch (SQLException e)
        {
            displaySQLErrors(e);
        }
    }

    public void buildGUI()
    {
        companyIDList = new List(10);
```

```
        loadCcompanies();
        add(companyIDList);

        companyIDList.addItemListener(new ItemListener()
        {
            public void itemStateChanged(ItemEvent e)
            {
                try
                {
                    rs = statement.executeQuery("SELECT * FROM company where ID ="+companyIDList.getSelectedItem());
                    rs.next();
                    sidText.setText(rs.getString("ID"));

    snameText.setText(rs.getString("NAME"));

    ratingText.setText(rs.getString("RATING"));

    addressText.setText(rs.getString("address"));
                }
                catch (SQLException selectException)
```

```
                    {
                        displaySQLErrors(selectException);
                    }
                }
            });


            updateCompanyButton = new Button("Update
Company");
            updateCompanyButton.addActionListener(new
ActionListener()
            {
                public void actionPerformed(ActionEvent e)
                {
                    try
                    {
                        Statement statement =
connection.createStatement();
                        int i =
statement.executeUpdate("UPDATE company "
                        + "SET name='" + snameText.getText()
+ "', "
```

```
                                + "rating=" + ratingText.getText() + ",
"
                                + "address ="'+ addressText.getText()
+ "' WHERE id = "
                                + companyIDList.getSelectedItem());
                                errorText.append("\nUpdated " + i + "
rows successfully");
                                i                                =
statement.executeUpdate("commit");

                                loadCompanies();
                        }
                        catch (SQLException insertException)
                        {
                                displaySQLErrors(insertException);
                        }
                }
        });

        sidText = new TextField(15);
        sidText.setEditable(false);
        snameText = new TextField(15);
```

```
ratingText = new TextField(15);
addressText = new TextField(15);

errorText = new TextArea(10, 40);
errorText.setEditable(false);

Panel first = new Panel();
first.setLayout(new GridLayout(4, 2));
first.add(new Label("Company ID:"));
first.add(sidText);
first.add(new Label("Name:"));
first.add(snameText);
first.add(new Label("Rating:"));
first.add(ratingText);
first.add(new Label("Address:"));
first.add(addressText);

Panel second = new Panel(new GridLayout(4, 1));
second.add(updateCompanyButton);

Panel third = new Panel();
```

```
            third.add(errorText);


            add(first);
            add(second);
            add(third);


            setSize(500, 600);
            setLayout(new FlowLayout());
            setVisible(true);


        }


        private void displaySQLErrors(SQLException e)
        {
            errorText.append("\nSQLException: " + e.getMessage()
+ "\n");
            errorText.append("SQLState:      " + e.getSQLState()
+ "\n");
            errorText.append("VendorError:    " + e.getErrorCode()
+ "\n");
        }
```

```
}
```

3)Delete a Company

```
package company;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
public class DeleteCompany extends Panel
{
        Button deleteCompanyButton;
        List companiesIDList;
        TextField sidText, snameText, ratingText, addressText;
        TextArea errorText;
        Connection connection;
        Statement statement;
        ResultSet rs;
```

```
public DeleteCompany()
{
    try
    {

Class.forName("oracle.jdbc.driver.OracleDriver");
    }
    catch (Exception e)
    {
        System.err.println("Unable to find and load driver");
        System.exit(1);
    }
    connectToDB();
}

public void connectToDB()
{
    try
    {
```

```
                                                    connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:
xe","assingment","vasavi");
                    statement = connection.createStatement();


                }
                catch (SQLException connectException)
                {
                    System.out.println(connectException.getMessage());

System.out.println(connectException.getSQLState());

System.out.println(connectException.getErrorCode());
                    System.exit(1);
                }
        }


         public void loadCompanies()
         {
                try
                {
```

```
                companiesIDList.removeAll();
                rs = statement.executeQuery("SELECT * FROM company");
                while (rs.next())
                {
                    companiesIDList.add(rs.getString("ID"));
                }
            }
            catch (SQLException e)
            {
                displaySQLErrors(e);
            }
        }

        public void buildGUI()
        {
            companiesIDList = new List(10);
            loadCompanies();
            add(companiesIDList);

            //When a list item is selected populate the text fields
```

```
companiesIDList.addItemListener(new ItemListener()
{
    public void itemStateChanged(ItemEvent e)
    {
        try
        {
            rs =
statement.executeQuery("SELECT * FROM company");
            while (rs.next())
            {
                if
(rs.getString("ID").equals(companiesIDList.getSelectedItem()))
                break;
            }
            if (!rs.isAfterLast())
            {

    sidText.setText(rs.getString("ID"));

    snameText.setText(rs.getString("NAME"));

    ratingText.setText(rs.getString("RATING"));
```

```
        addressText.setText(rs.getString("Address"));
                        }
                    }
                    catch (SQLException selectException)
                    {
                        displaySQLErrors(selectException);
                    }
                }
            });


            deleteCompanyButton = new Button("Delete
Company");
            deleteCompanyButton.addActionListener(new
ActionListener()
            {
                public void actionPerformed(ActionEvent e)
                {
                    try
                    {
```

```
                    Statement statement =
connection.createStatement();
                    int i =
statement.executeUpdate("DELETE FROM company WHERE ID
= "
                                +
companiesIDList.getSelectedItem());
                    errorText.append("\nDeleted " + i + "
rows successfully");
                    sidText.setText(null);
                    snameText.setText(null);
                    ratingText.setText(null);
                    addressText.setText(null);
                    statement.executeUpdate("commit");
                    loadCompanies();
                }
                catch (SQLException insertException)
                {
                    displaySQLErrors(insertException);
                }
            }
        });
```

```
sidText = new TextField(15);
snameText = new TextField(15);
ratingText = new TextField(15);
addressText = new TextField(15);

errorText = new TextArea(10, 40);
errorText.setEditable(false);

Panel first = new Panel();
first.setLayout(new GridLayout(4, 2));
first.add(new Label("Company ID:"));
first.add(sidText);
first.add(new Label("Name:"));
first.add(snameText);
first.add(new Label("Rating:"));
first.add(ratingText);
first.add(new Label("Address:"));
first.add(addressText);

Panel second = new Panel(new GridLayout(4, 1));
```

```
        second.add(deleteCompanyButton);

        Panel third = new Panel();
        third.add(errorText);

        add(first);
        add(second);
        add(third);

        setSize(450, 600);
        setLayout(new FlowLayout());
        setVisible(true);

    }

    private void displaySQLErrors(SQLException e)
    {
        errorText.append("\nSQLException: " + e.getMessage()
+ "\n");
```

```
                errorText.append("SQLState:          " + e.getSQLState()
+ "\n");
                errorText.append("VendorError:    " + e.getErrorCode()
+ "\n");
        }


}
```

4)Main FrontEndApplication

```
import java.awt.*;
import java.awt.event.*;

import javax.swing.*;
import javax.swing.JOptionPane;
import company.*;
```

```
import person.AddPerson;
import person.DeletePerson;
import person.UpdatePerson;
import report.AddReport;
import report.DeleteReport;
import report.UpdateReport;
import scanner.AddScanner;
import scanner.DeleteScanner;
import scanner.UpdateScanner;
;class frontPage extends JFrame implements ActionListener
{
        String msg = "";
        Label ll;
        CardLayout cardLO;

        AddCompany add;
        UpdateCompany ups;
        DeleteCompany dels;
        AddPerson addP;
        UpdatePerson upP;
        DeletePerson delP;
```

```
AddScanner addS;
UpdateScanner upS;
DeleteScanner delS;
AddReport addR;
DeleteReport delR;
UpdateReport upR;

Panel home,welcome;

public frontPage()
{
        cardLO = new CardLayout();

        home = new Panel();
        home.setLayout(cardLO);



        ll = new Label();
        ll.setAlignment(Label.CENTER);
        ll.setText("Welcome to Retina based age classigication System database");
```

```
welcome = new Panel();
welcome.add(ll);

add=new AddCompany();add.buildGUI();
ups = new UpdateCompany();    ups.buildGUI();
dels = new DeleteCompany();      dels.buildGUI();
addP = new AddPerson();addP.buildGUI();
upP = new UpdatePerson();upP.buildGUI();
delP=new DeletePerson();delP.buildGUI();
addS=new AddScanner();addS.buildGUI();
upS=new UpdateScanner();upS.buildGUI();
delS=new DeleteScanner();delS.buildGUI();
addR=new AddReport();addR.buildGUI();
delR=new DeleteReport();delR.buildGUI();
upR=new UpdateReport();upR.buildGUI();

home.add(welcome, "Welcome");
home.add(add, "Add Company");
home.add(ups, "Update Company");
home.add(dels, "Delete Company");
```

```
home.add(addP, "Add Person");
home.add(upP, "Update Person");
home.add(delP,"Delete Person");
home.add(addS,"Add Scanner");
home.add(upS,"Update Scanner");
home.add(delS,"Delete Scanner");
home.add(addR,"Add Report");
home.add(delR,"Delete Report");
home.add(upR,"Update Report");

add(home);

MenuBar mbar = new MenuBar();
setMenuBar(mbar);

Menu Compnay = new Menu("Company ");
MenuItem item1, item2, item3;
Compnay.add(item1 = new MenuItem("Add Company"));
Compnay.add(item2 = new MenuItem("View Company"));
```

```
                Compnay.add(item3 = new MenuItem("Delete
Company"));
                mbar.add(Compnay);

                Menu Scanner = new Menu("Scanner");
                MenuItem item4, item5, item6;
                Scanner.add(item4 = new MenuItem("Add
Scanner"));
                Scanner.add(item5 = new MenuItem("View
Scanners"));
                Scanner.add(item6 = new MenuItem("Delete
Scanner"));
                mbar.add(Scanner);

                Menu Person = new Menu("Person");
                MenuItem item7, item8, item9;
                Person.add(item7 = new MenuItem("Add
Person"));
                Person.add(item8 = new MenuItem("View
Persons"));
                Person.add(item9 = new MenuItem("Delete
Person"));
                mbar.add(Person);
```

```
Menu Report = new Menu("Report");
MenuItem item10, item11, item12;
Report.add(item10 = new MenuItem("Add Report"));
Report.add(item11 = new MenuItem("View Report"));
Report.add(item12 = new MenuItem("Delete Report"));
mbar.add(Report);

item1.addActionListener(this);
item2.addActionListener(this);
item3.addActionListener(this);
item4.addActionListener(this);
item5.addActionListener(this);
item6.addActionListener(this);
item7.addActionListener(this);
item8.addActionListener(this);
item9.addActionListener(this);
item10.addActionListener(this);
item11.addActionListener(this);
```

```
                item12.addActionListener(this);



                addWindowListener(new WindowAdapter(){
                        public void windowClosing(WindowEvent
we)
                        {
                                quitApp();
                        }
                });

                setTitle("Retina Based Age Classification
System");
                setSize(500, 600);
                setVisible(true);


        }


        public void actionPerformed(ActionEvent ae)
        {
                String arg = ae.getActionCommand();
```

```
 if(arg.equals("Add Company"))
 {
     cardLO.show(home, "Add Company");

}

else if(arg.equals("View Company"))
{
     cardLO.show(home, "Update Company");
     ups.loadCompanies();
}

else if(arg.equals("Delete Company"))
{
     cardLO.show(home, "Delete Company");
     dels.loadCompanies();
}

else if(arg.equals("Add Person"))
{
```

```
            cardLO.show(home, "Add Person");


        }
        else if(arg.equals("View Persons"))
        {
            cardLO.show(home, "Update Person");
            upP.loadPersons();
        }
        else if(arg.equals("Delete Person"))
        {
            cardLO.show(home, "Delete Person");
            delP.loadPersons();
        }
        else if(arg.equals("Add Scanner"))
        {
            cardLO.show(home, "Add Scanner");
        }
        else if(arg.equals("View Scanners"))
        {
            cardLO.show(home, "Update Scanner");
            upS.loadScanners();
```

```
        }
        else if(arg.equals("Delete Scanner"))
        {
            cardLO.show(home, "Delete Scanner");
            delS.loadScanners();
        }
        else if(arg.equals("Add Report"))
        {
            cardLO.show(home, "Add Report");
        }
        else if(arg.equals("Delete Report"))
        {
            cardLO.show(home, "Delete Report");
            delR.loadReports();
        }
        else if(arg.equals("View Report"))
        {
            cardLO.show(home, "Update Report");
            upR.loadReports();
        }
```

```
        }
        private void quitApp () {

                try {
                        int reply = JOptionPane.showConfirmDialog (this,
                        "Are you really want to exit\nFrom ReTina Scanner System?",
                        "RetinaSystem - Exit", JOptionPane.YES_NO_OPTION,
JOptionPane.PLAIN_MESSAGE);

                        if (reply == JOptionPane.YES_OPTION) {
                        setVisible (false);
                        dispose();
                        System.out.println ("Thanks for Using Retina based age classification System\nAuthor - sai rohith sheela");
                        System.exit (0);
                        }
```

```
                    else if (reply == JOptionPane.NO_OPTION)
{

    setDefaultCloseOperation(JFrame.DO_NOTHING_ON_CL
OSE);
                    }
                }

                catch (Exception e) {}

            }
        public static void main(String ... args)
        {
                new frontPage();
        }


}
```

5.Connectivity with the Database:

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database and is oriented towards relational databases.

Block of code for JAVA- SQL connectivity with JDBC:

```
public void connectToDB()
        {
                try
                {
                                                connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","assingment","vasavi");
                    statement = connection.createStatement();

                }
                catch (SQLException connectException)
                {

System.out.println(connectException.getMessage());

System.out.println(connectException.getSQLState());

System.out.println(connectException.getErrorCode());
                    System.exit(1);
```

```
        }
    }
```

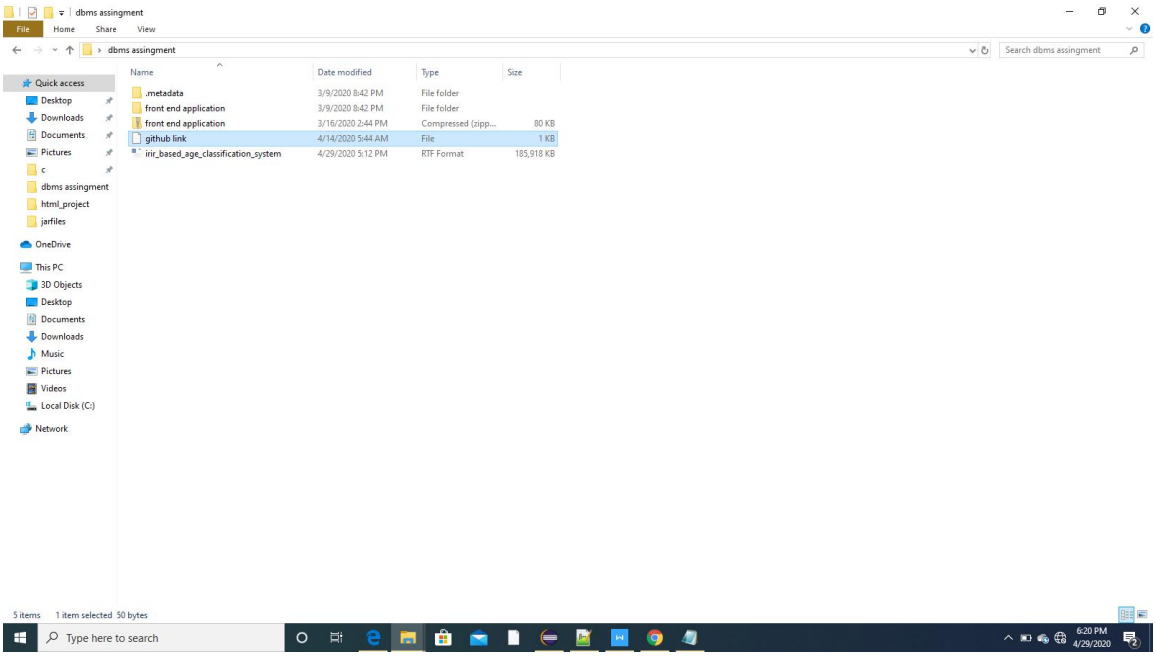
6.GITHUB LINK:

https://github.com/sheelasairohith/dbma_assingment

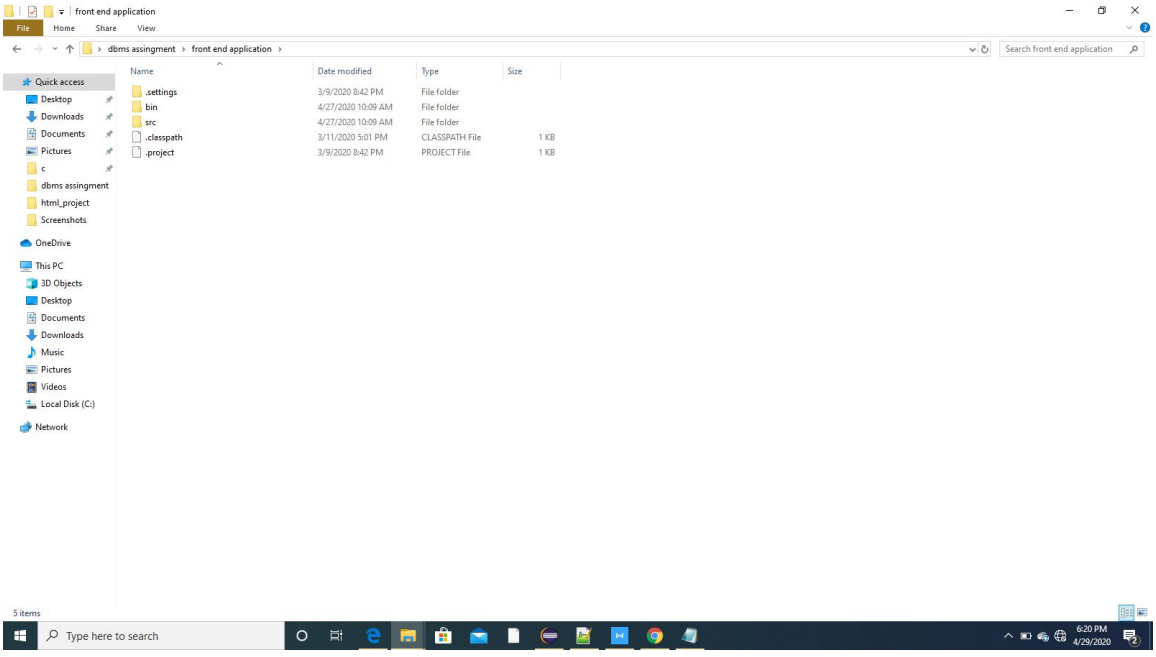
7.Folder Structure:

This project contains a folder named src in which it has 1 .java files which belongs to main front end application and this src folder contains 4 additional folders where each folder contains code to insert, delete, update for erquried tables present in the backend. By which we can navigate easily to reach the java code and we can make changes easily.

DBMS ASSIGNMENT -2
Title: Iris based age classification system

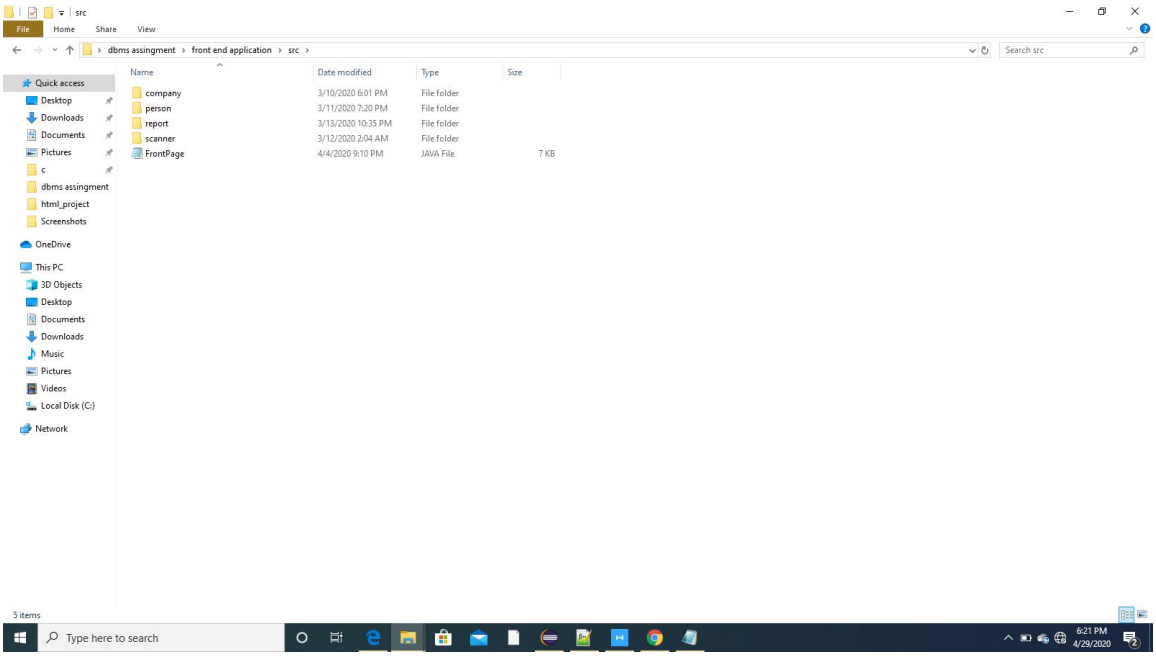


NOTE: in this select front end application folder to see next page.

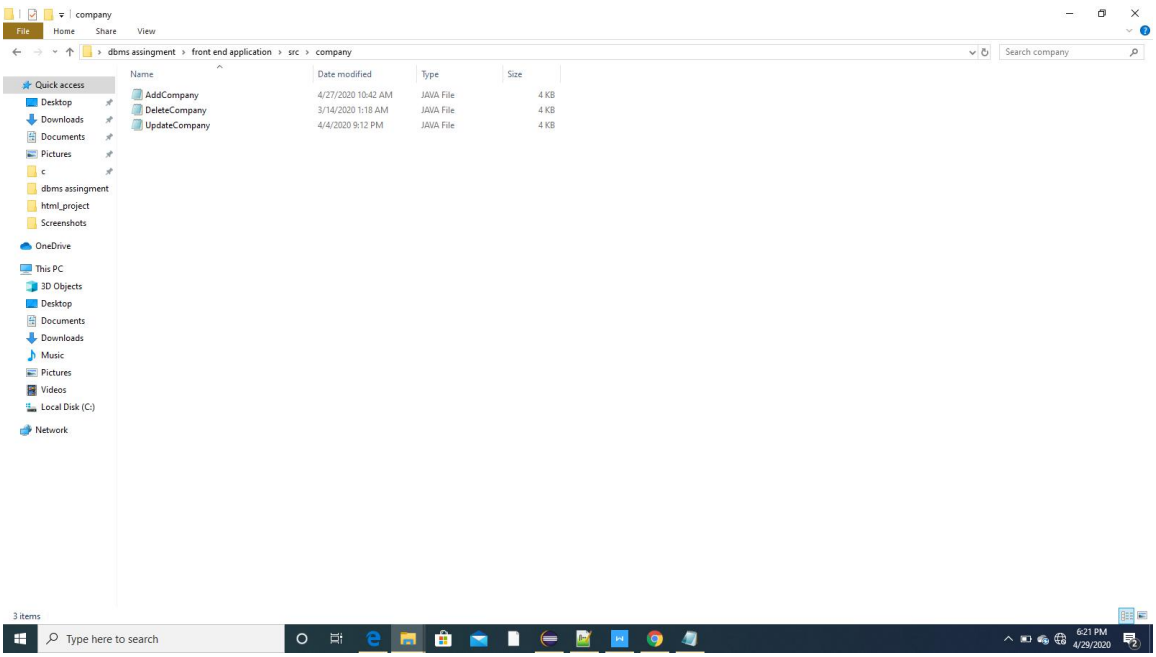


NOTE: now select src to view below folders.

DBMS ASSIGNMENT -2
Title: Iris based age classification system



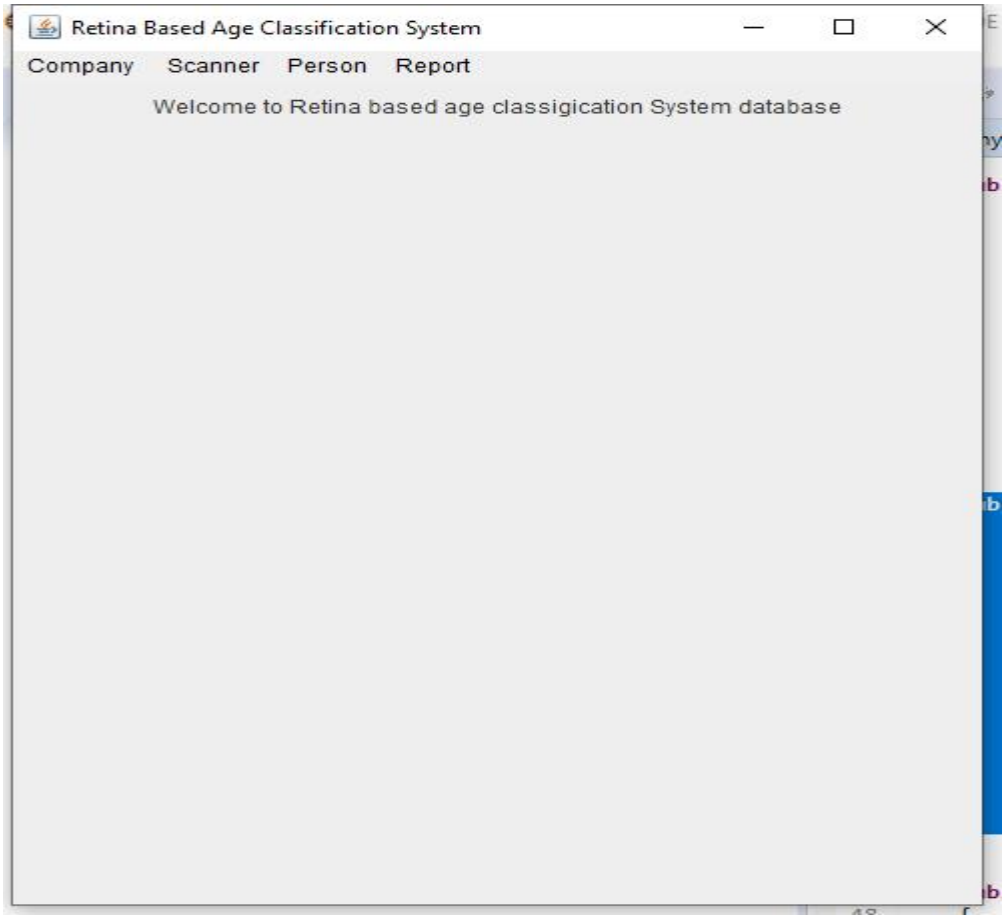
NOTE: in this each folder contains 3 .java files for example if you select folder called company then it will be like..



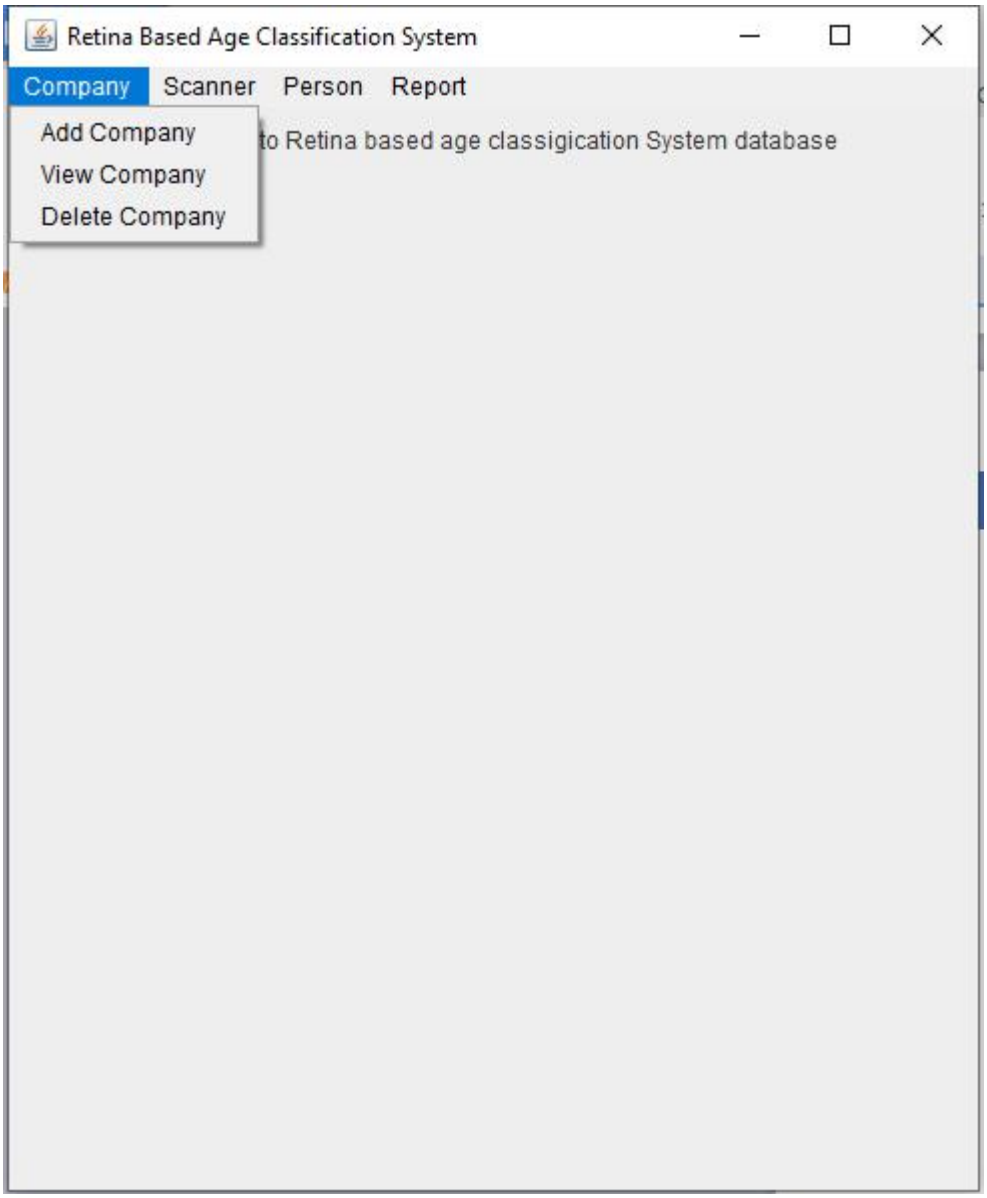
8.TESTING

The program runs for execution of three basic operations of insertion, update and delete on 5 different table. Along with this, it also has a output column which gives the information about how many rows have been edited. Errors, syntactical or exceptional will be shown if occurred.

HOME PAGE:

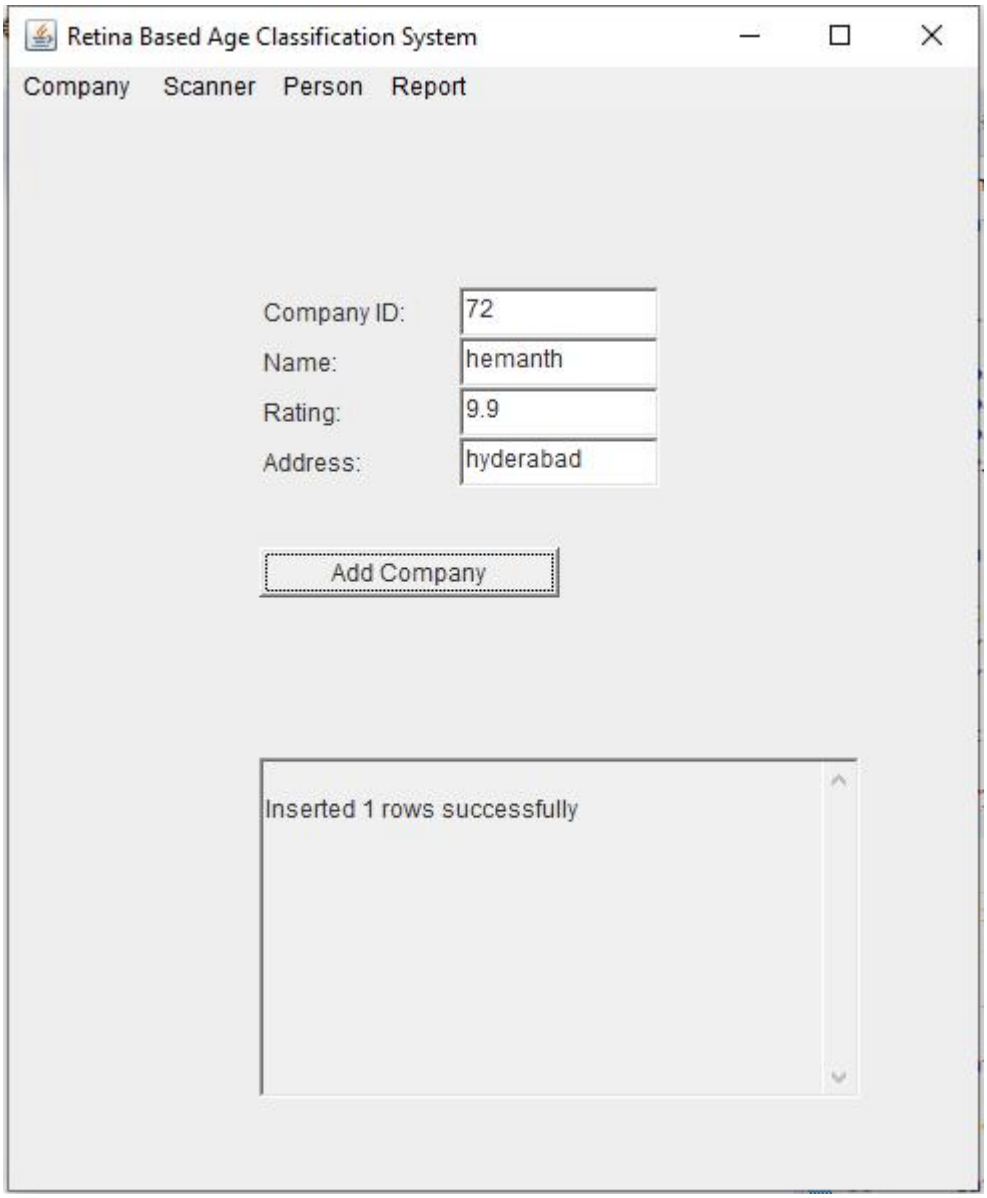


DBMS ASSIGNMENT -2
Title: Iris based age classification system



Name : S.Sai Rohith Roll Number : 1602-18-737-098

INSERT Company:

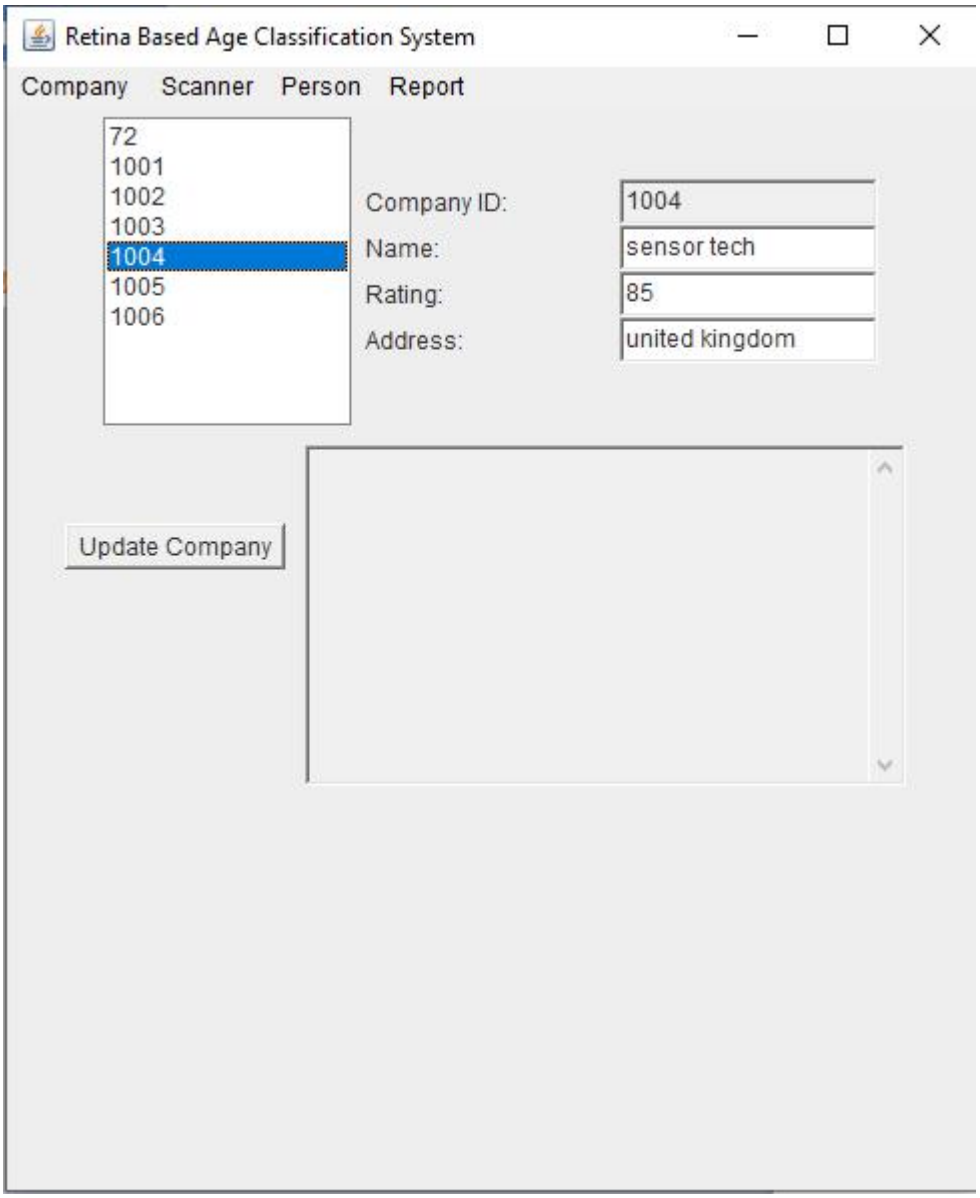


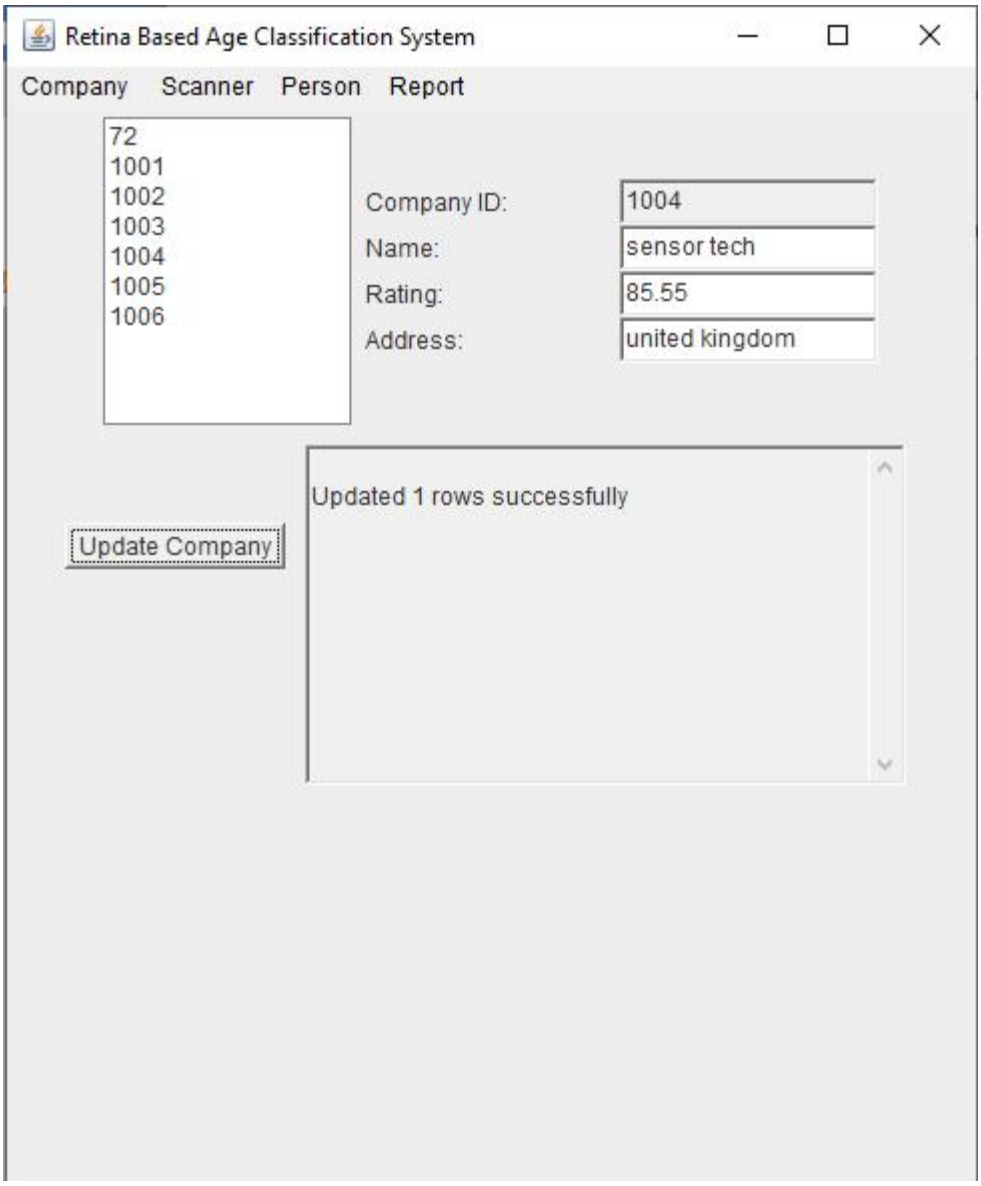
DBMS ASSIGNMENT -2
Title: Iris based age classification system

```
SQL> select * from company;

        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1001 iris id              united states
        95

      1002 cmi tech             korea
        90

      1003 princeton identity   united states
        85


        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
      1004 sensor tech          united kingdom
        85

      1005 argus                united kingdom
        85

      1006 anoop                hyd
      98.5


        ID NAME                 ADDRESS
---------- -------------------- ----------------------------------------
    RATING
----------
        72 hemanth              hyderabad
      9.99


7 rows selected.

SQL>
```

Name : S.Sai Rohith Roll Number : 1602-18-737-098

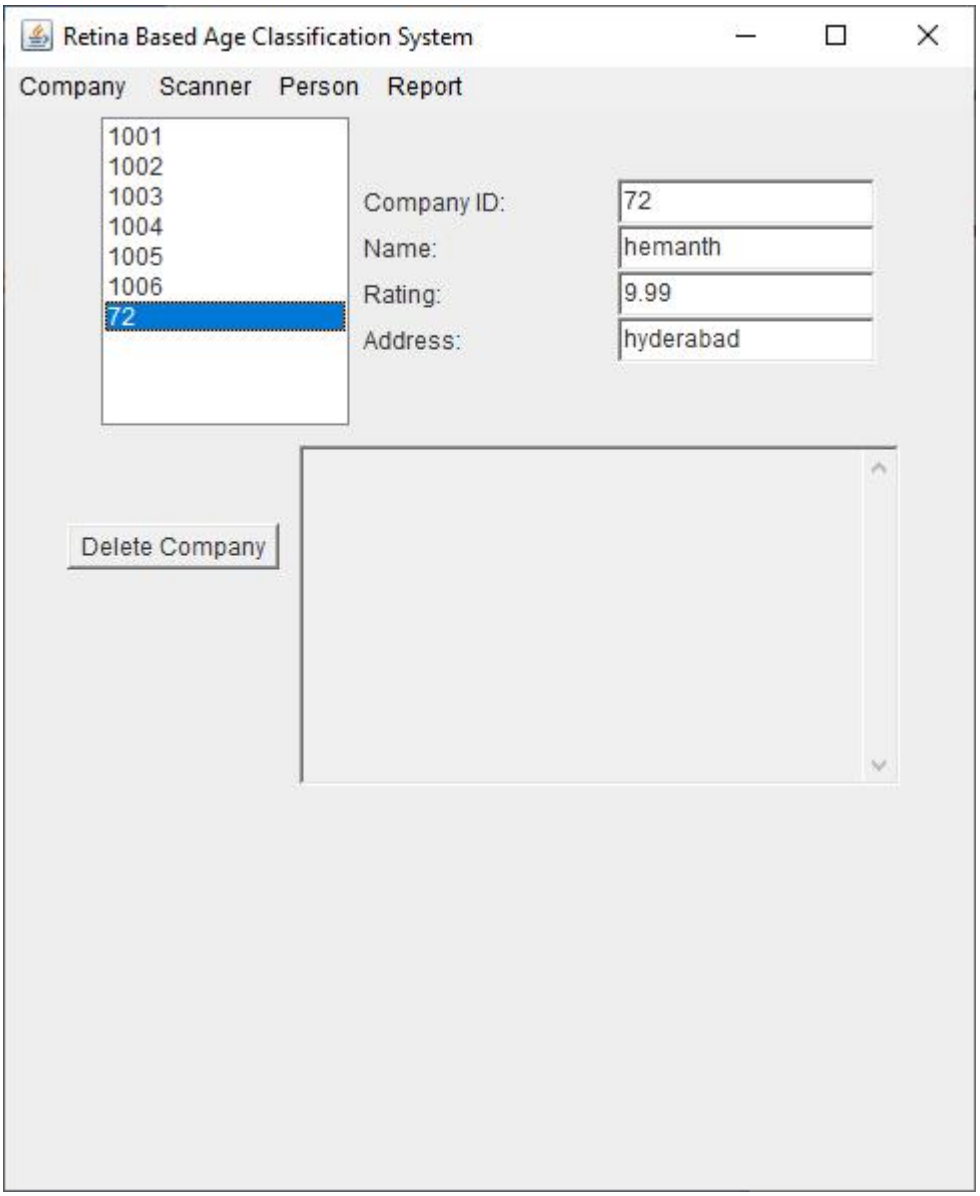
UPDATE Company:



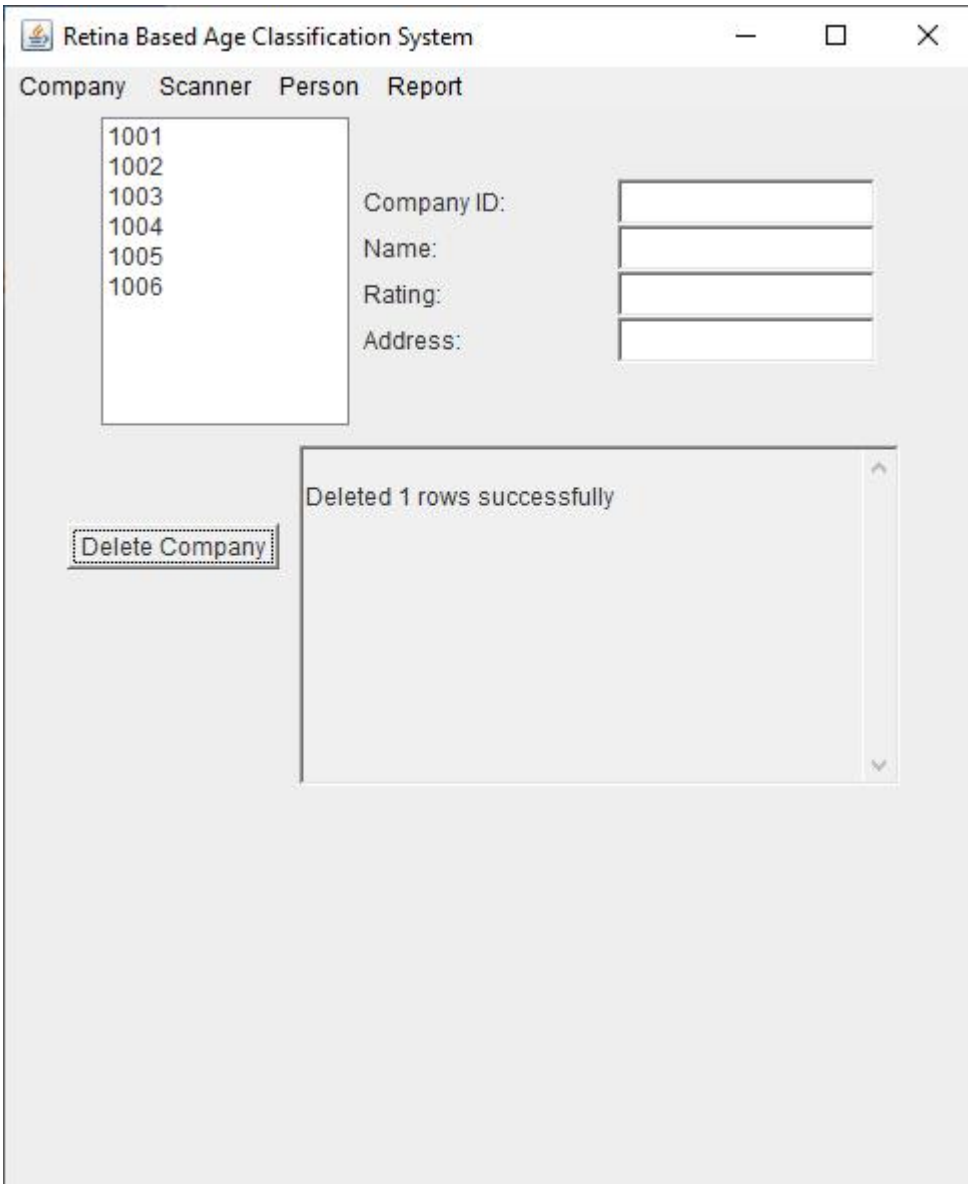


DELETE Company:

Before selecting delete company button:



After selecting delete company button:

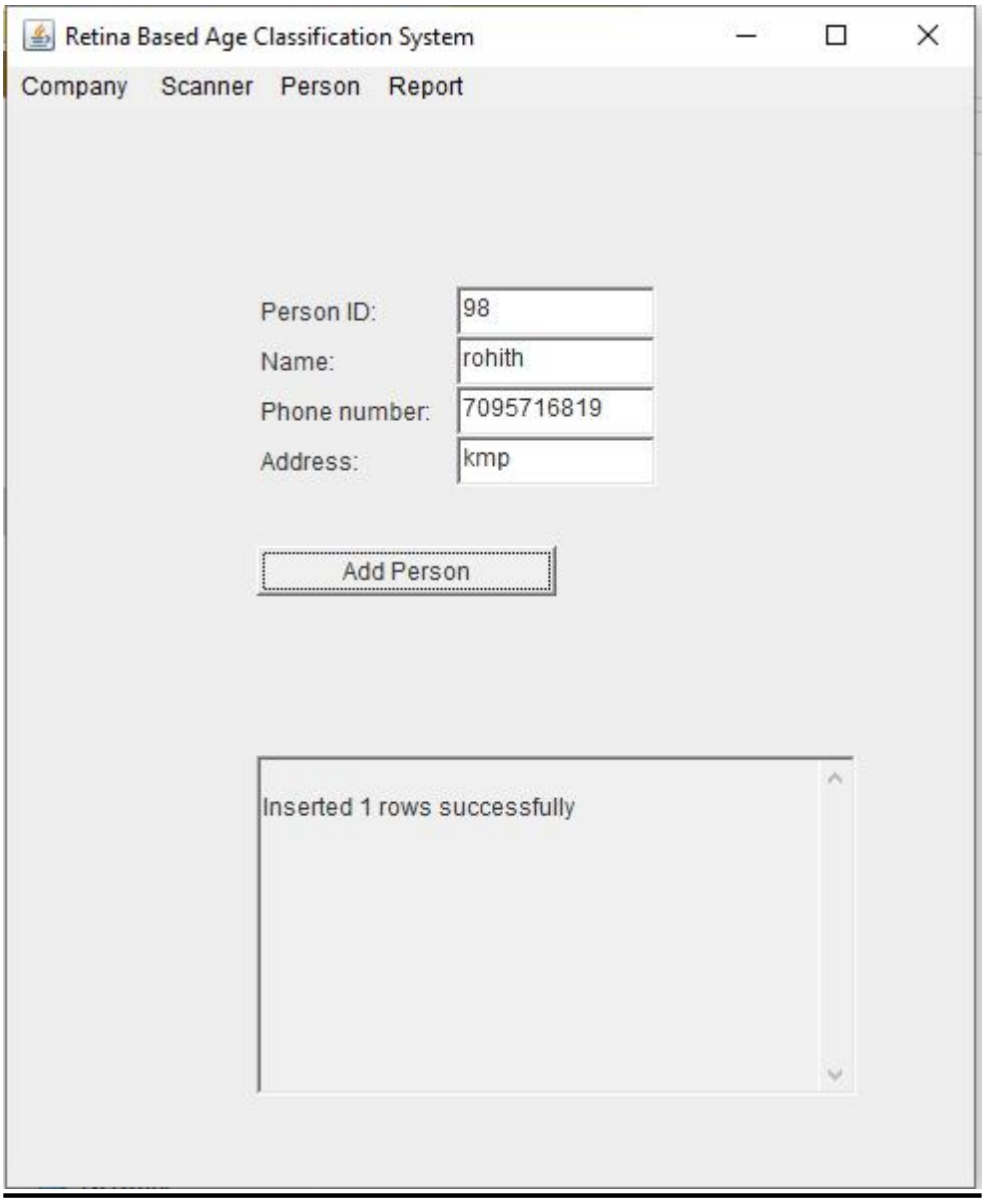


DBMS ASSIGNMENT -2
Title: Iris based age classification system

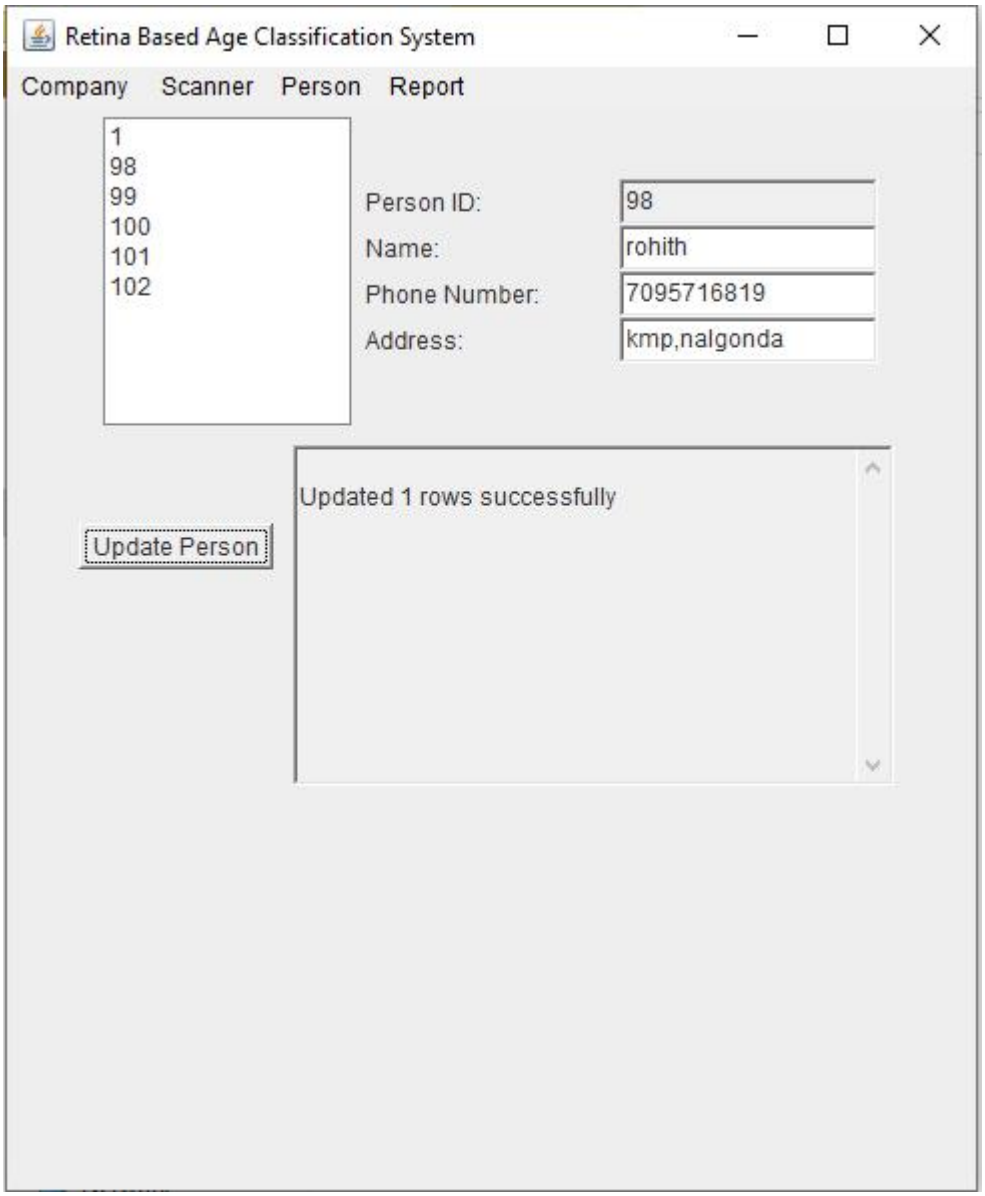
```
SQL> select * from company;

        ID NAME                 ADDRESS
---------- -------------------- ---------------------------------------
    RATING
----------
      1001 iris id              united states
        95

      1002 cmi tech             korea
        90

      1003 princeton identity   united states
        85


        ID NAME                 ADDRESS
---------- -------------------- ---------------------------------------
    RATING
----------
      1004 sensor tech          united kingdom
     85.55

      1005 argus                united kingdom
        85

      1006 anoop                hyd
      98.5


6 rows selected.

SQL>
```

Name : S.Sai Rohith Roll Number : 1602-18-737-098

Add Person/Insert Person :

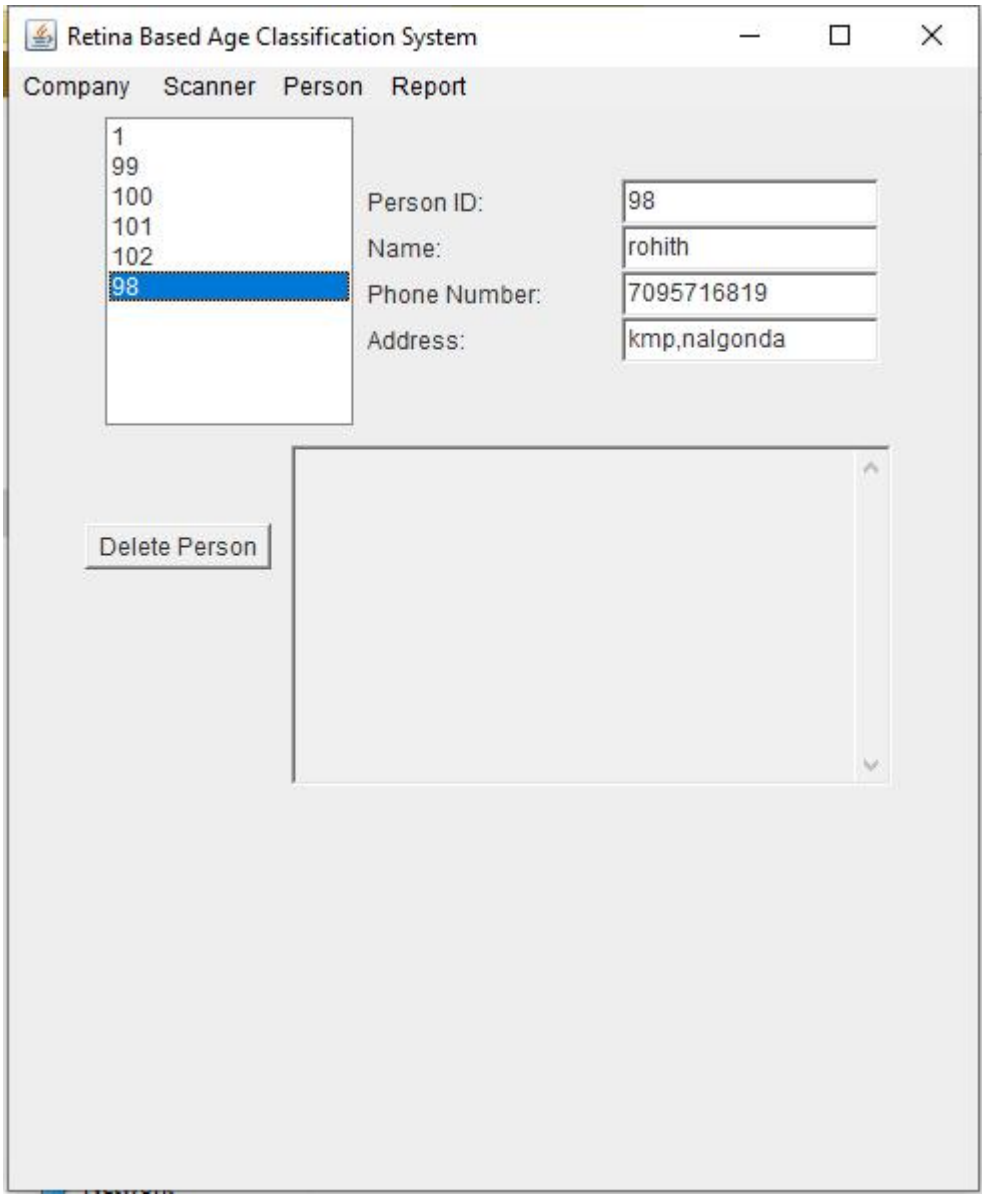


Update Person :

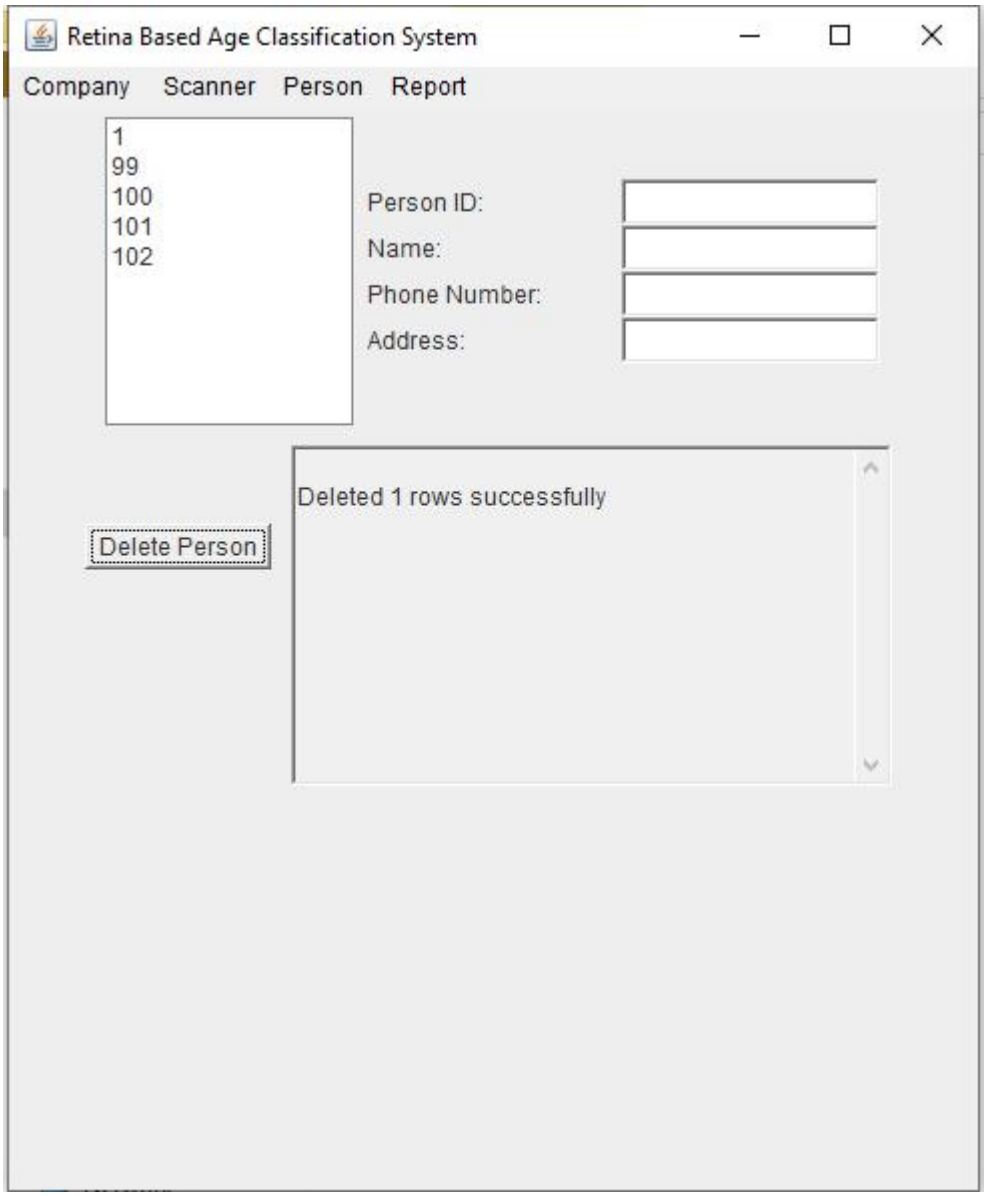


Delete Person:

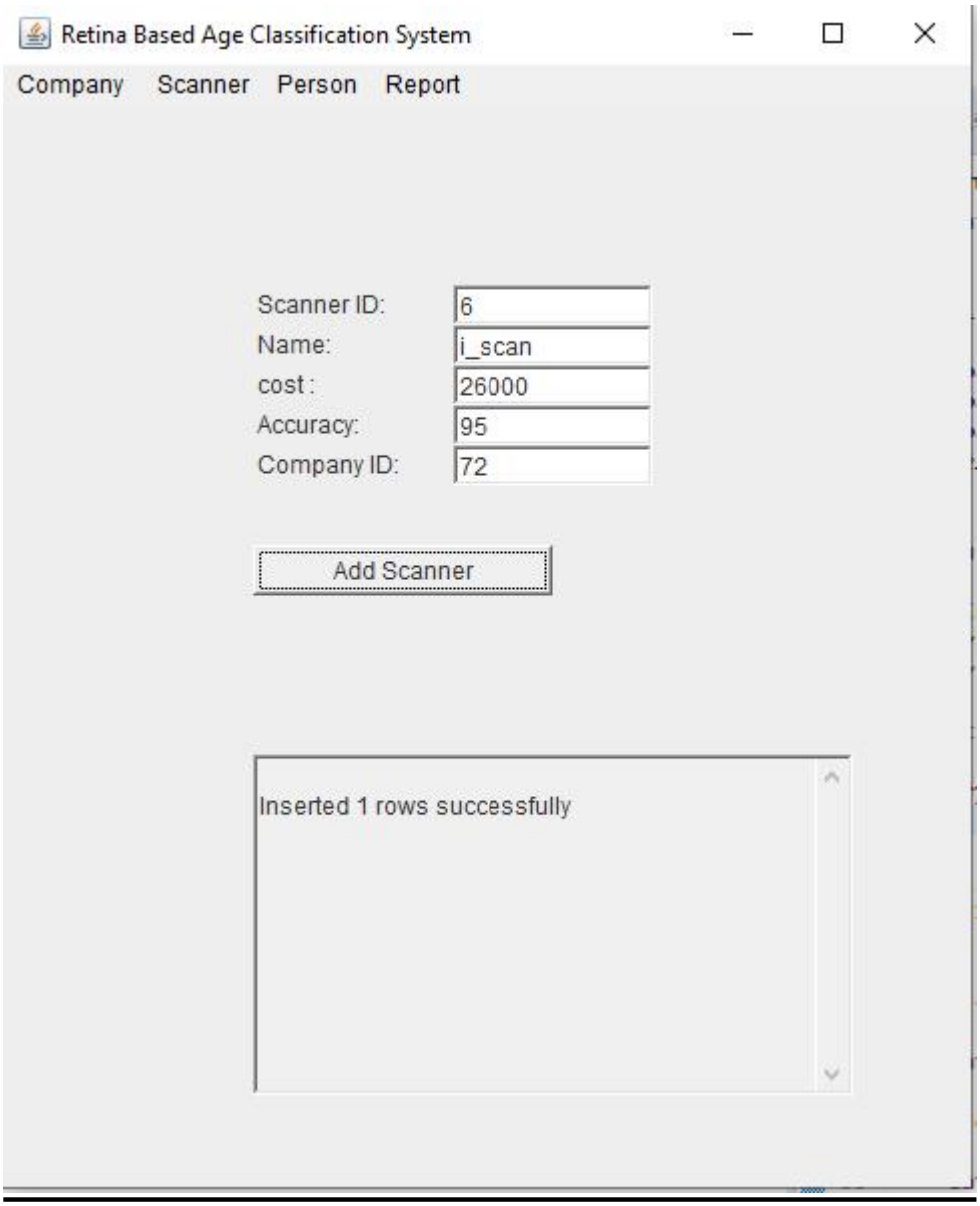
Before selecting delete button:



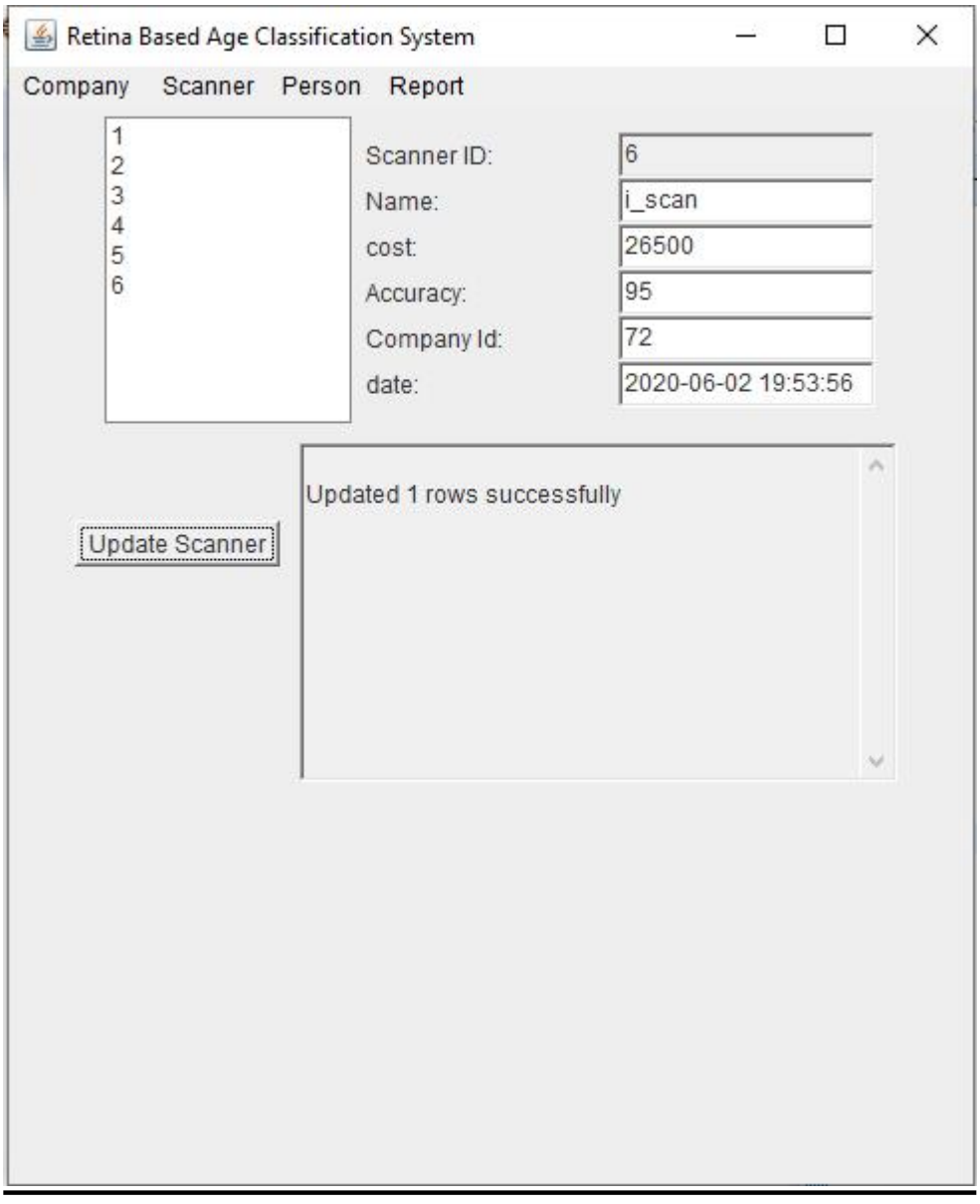
After selecting delete button:



Add Scanner/Insert new scanner:

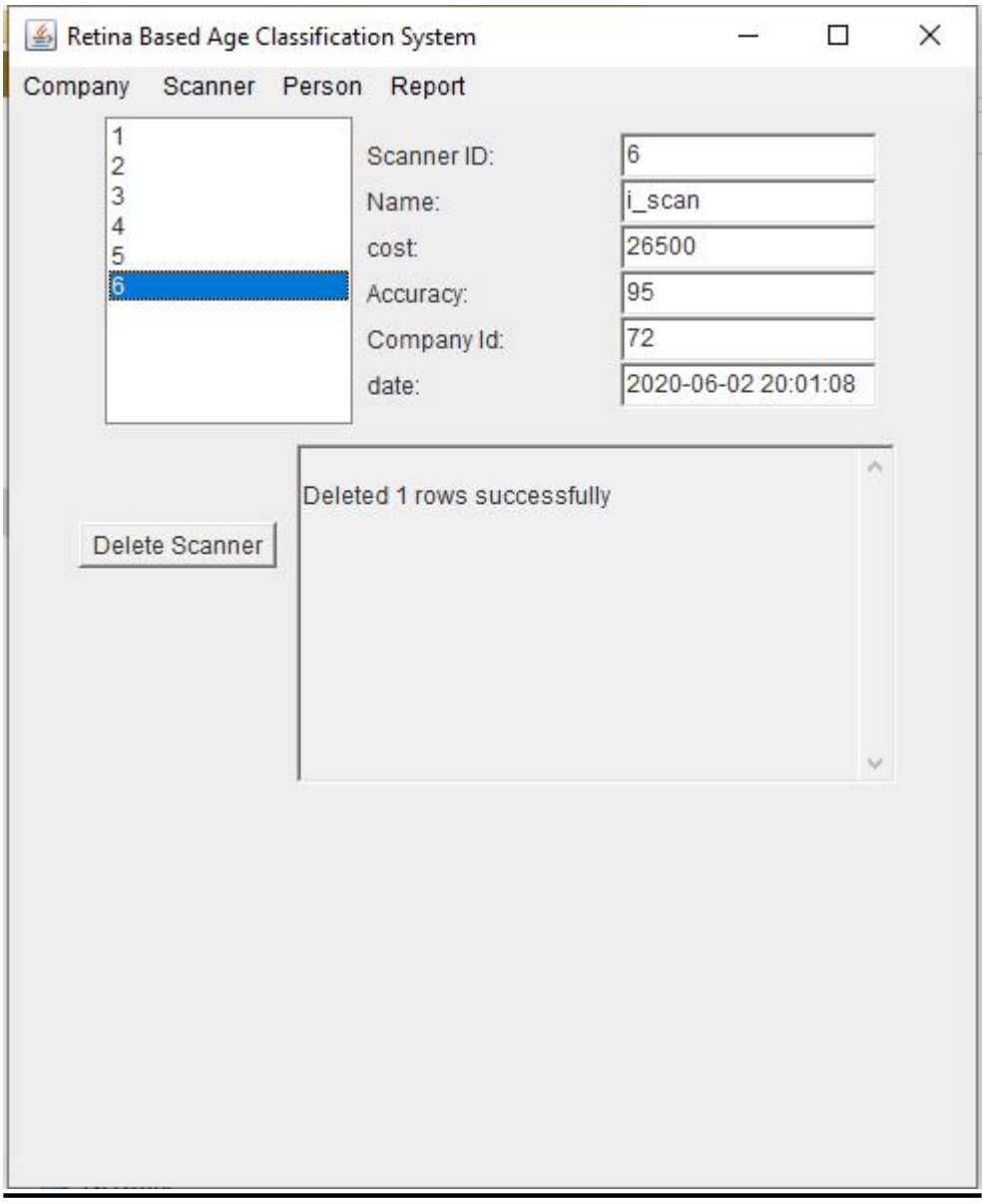


Update Scanner:

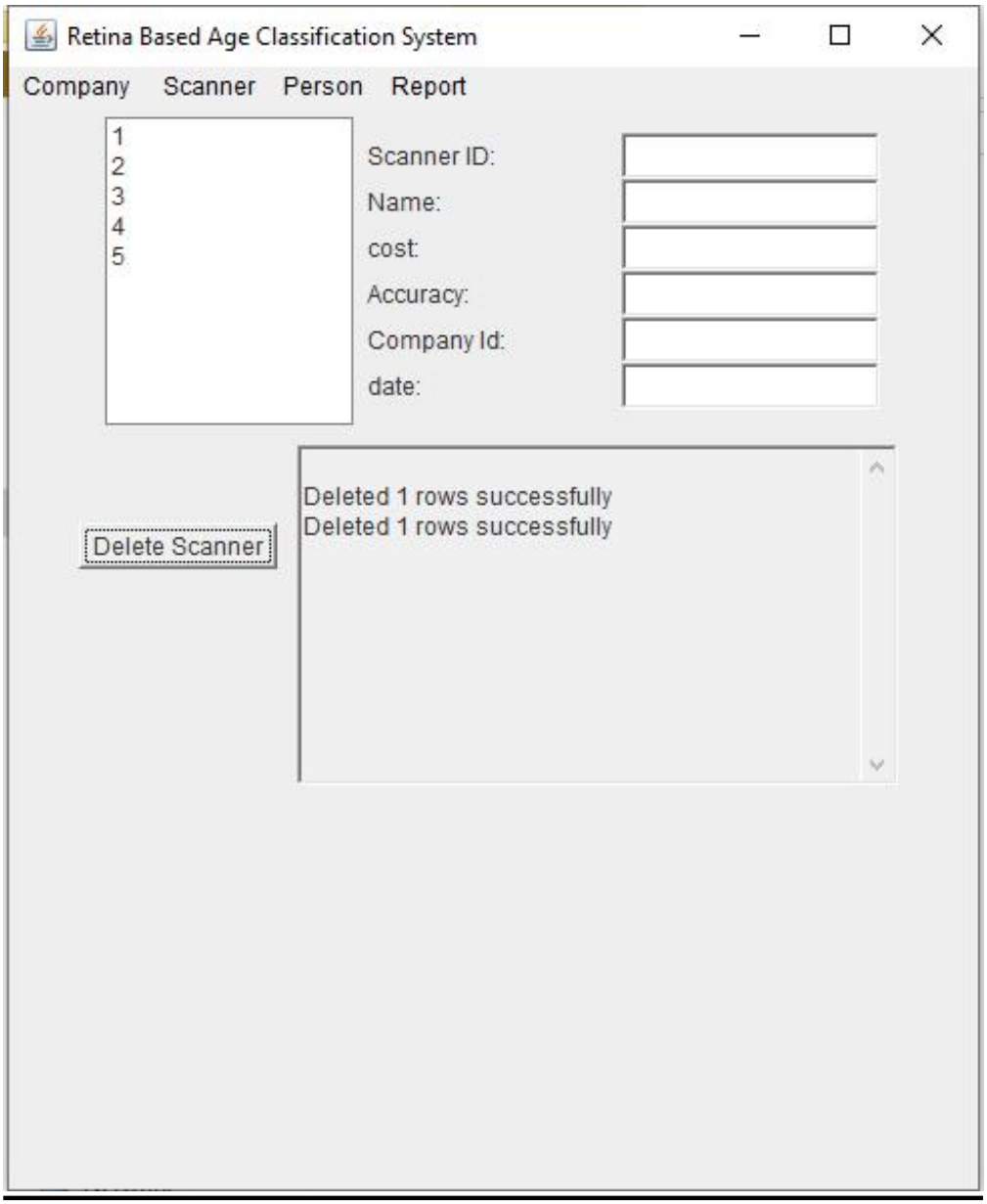


Delete Scanner :

before selecting delete button:

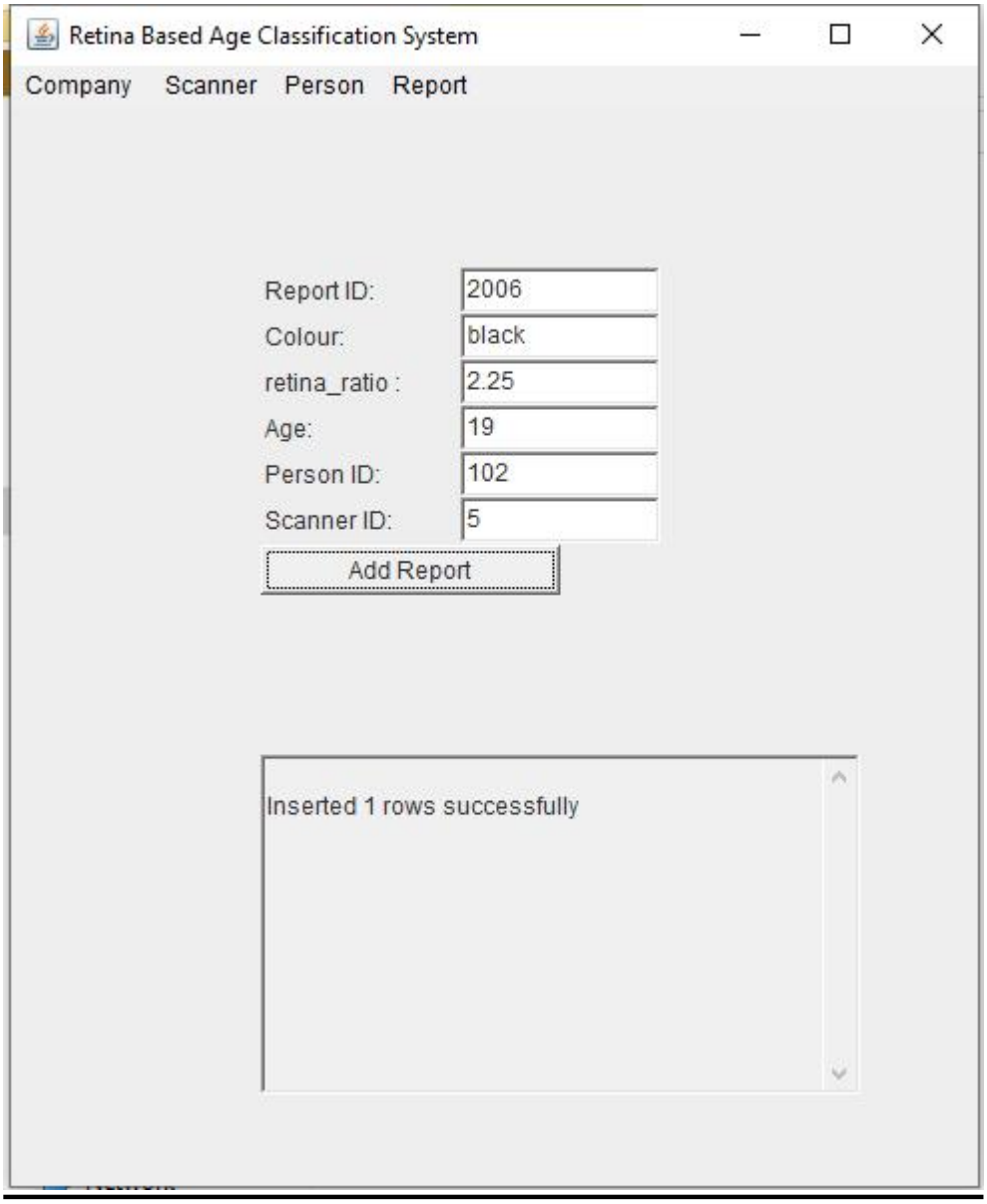


After selecting delete button:



DBMS ASSIGNMENT -2
Title: Iris based age classification system

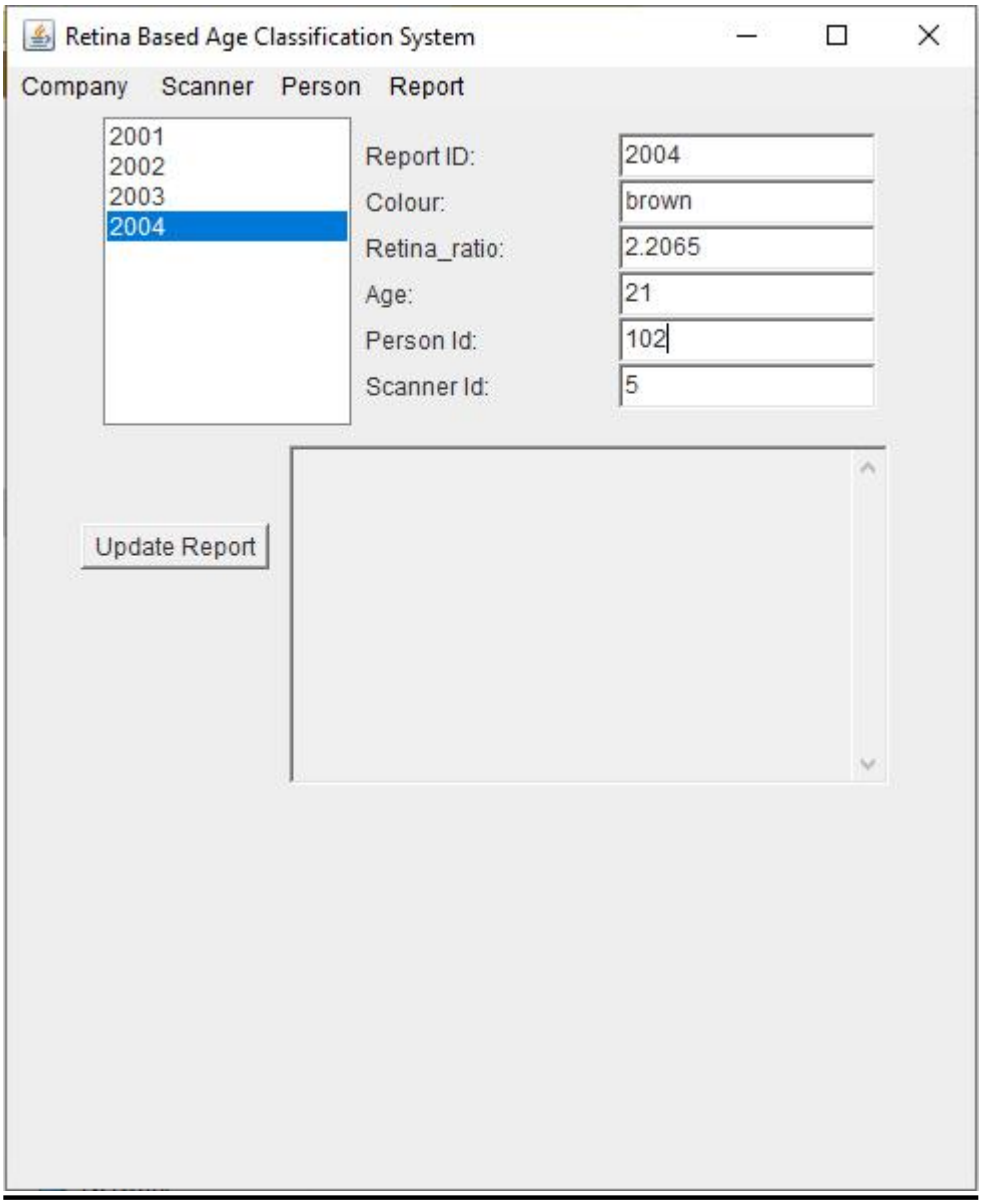
Add Report:



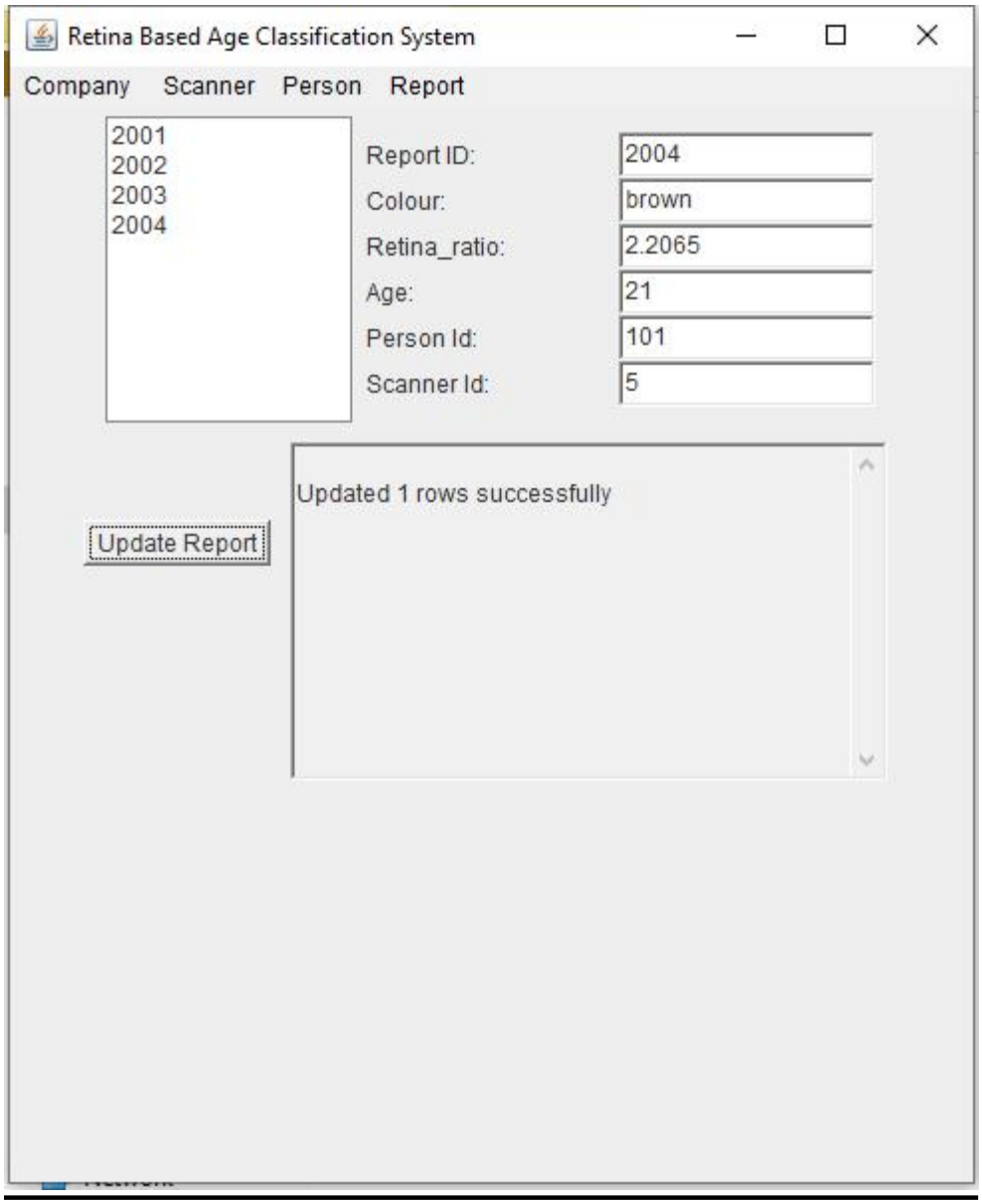
Update Report :

Name : S.Sai Rohith Roll Number : 1602-18-737-098

DBMS ASSIGNMENT -2
Title: Iris based age classification system

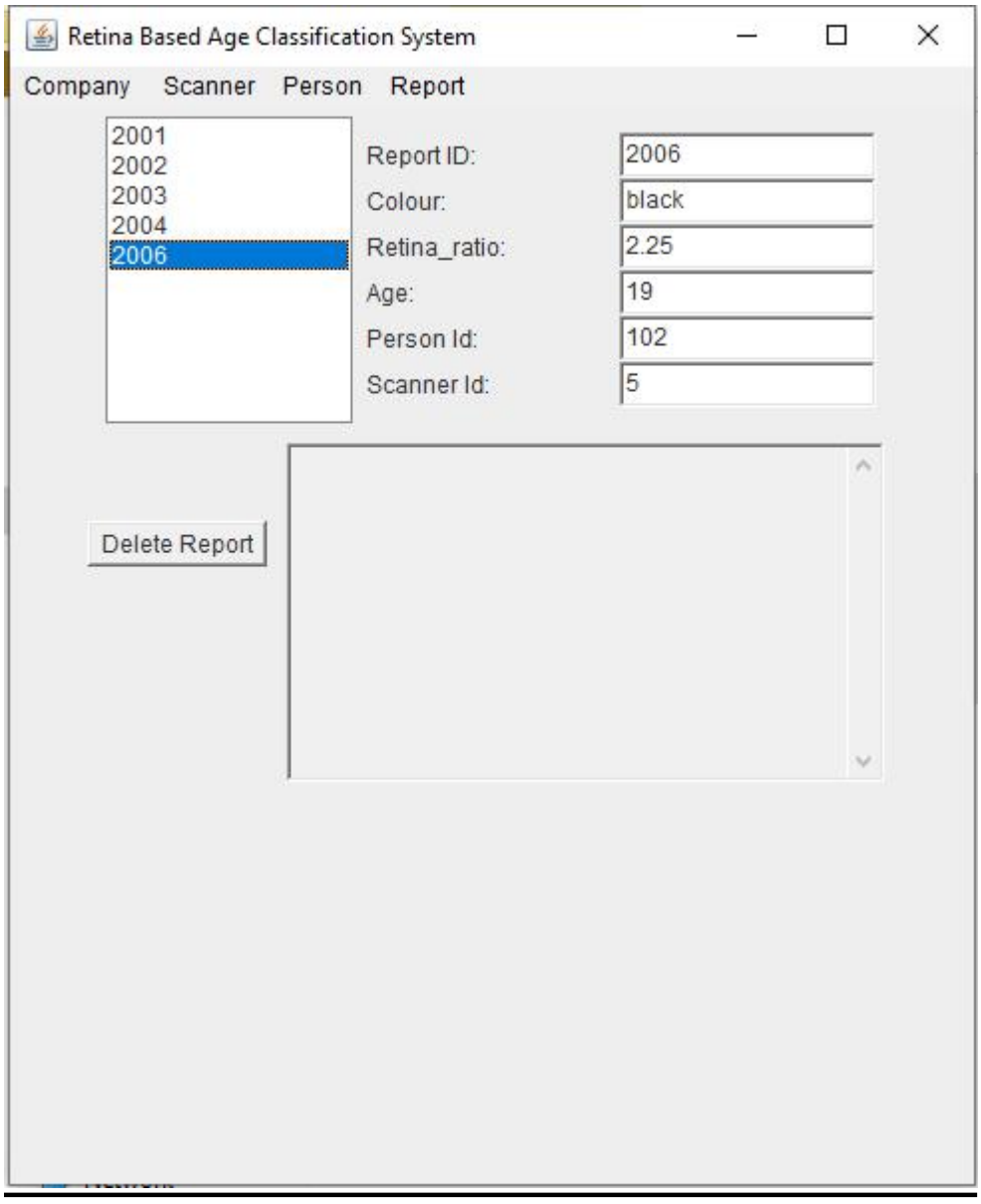


Name : S.Sai Rohith Roll Number : 1602-18-737-098

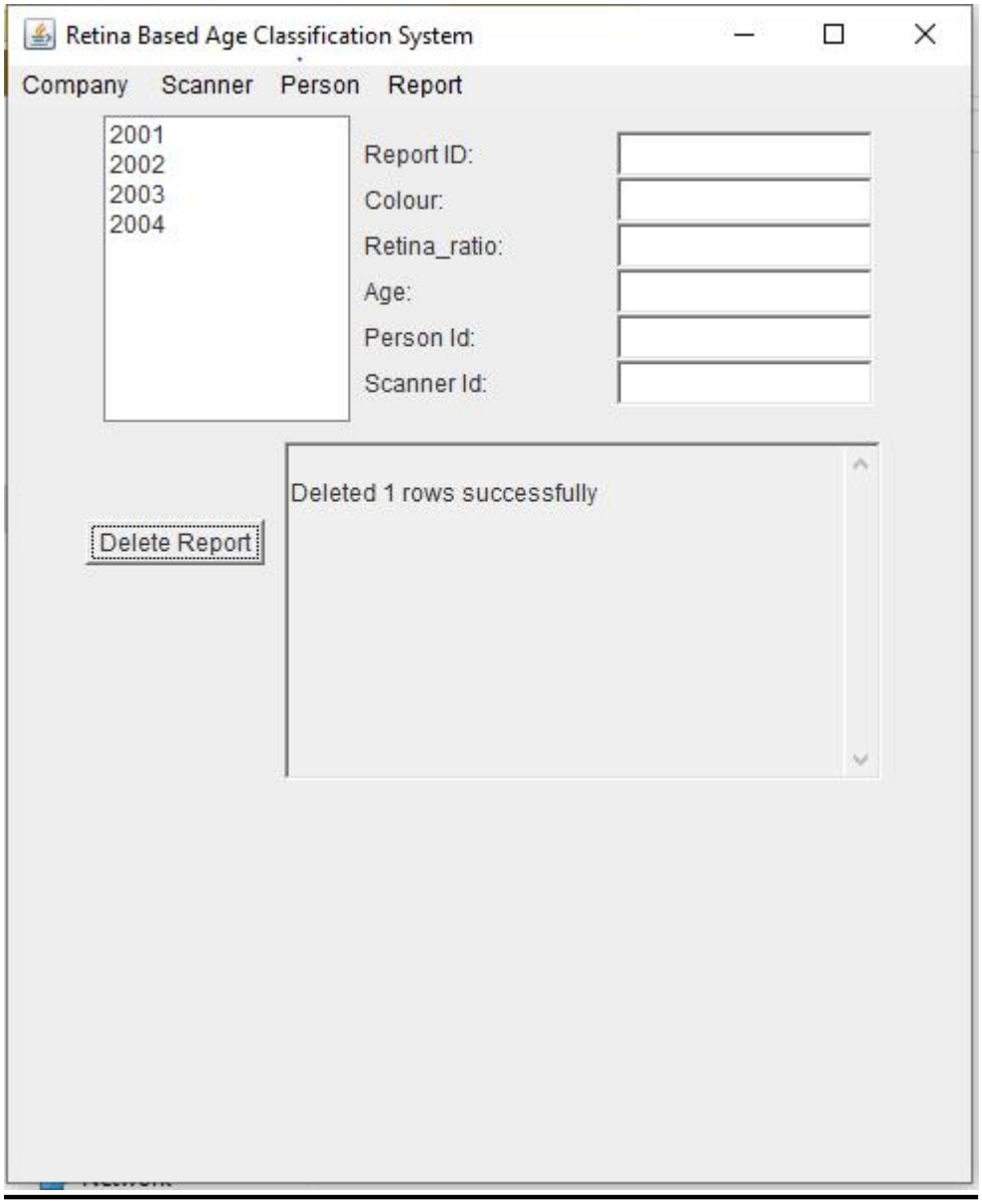


Delete Report :

Before selecting delete button:



After selecting delete button:

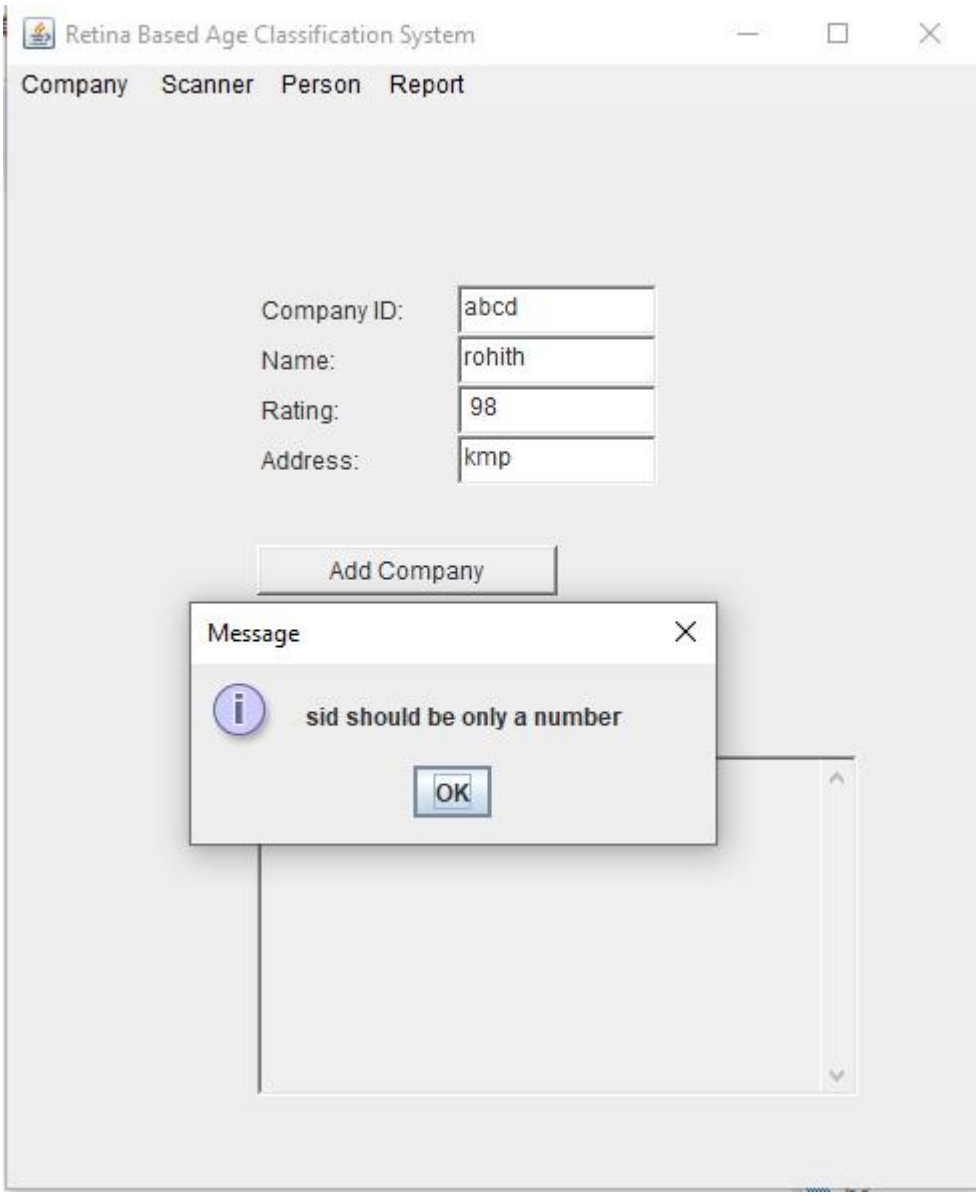


9.Extra features present in the application:

1) Many times unknowingly we may give mismatching data types in the text fields like id's, etc. So in this application we will show warning to the users when they give wrong data with the help of jOptionPane present in the swing package.

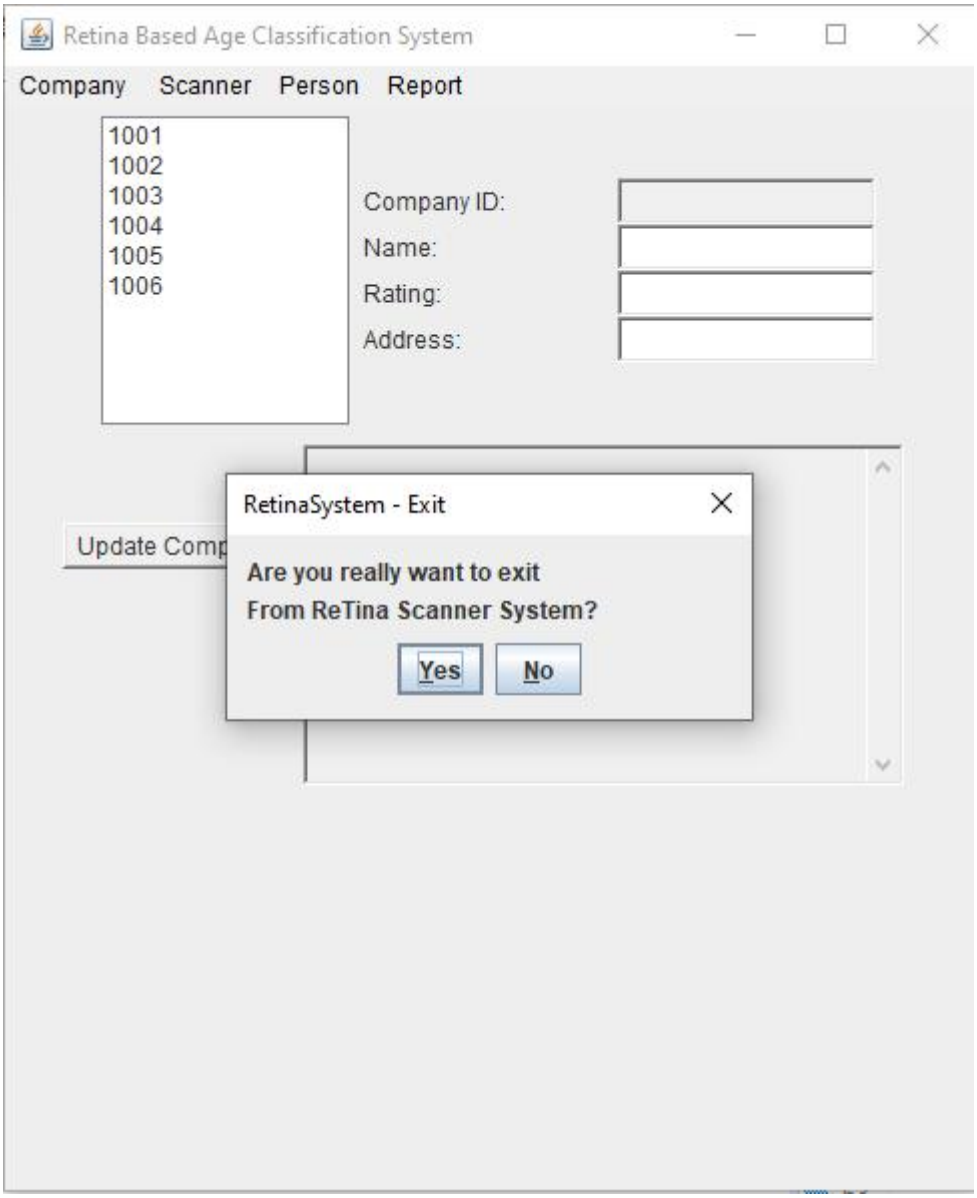
2) Many times unknowingly we may click exit button and then we realize we have clicked exit and we need to start the work from first. To avoid this problem when a user click exit opion we will show a option like do you really want to exit if he click yes then only we will close the application.

DBMS ASSIGNMENT -2
Title: Iris based age classification system



Name : S.Sai Rohith Roll Number : 1602-18-737-098

DBMS ASSIGNMENT -2
Title: Iris based age classification system



Name : S.Sai Rohith Roll Number : 1602-18-737-098

10.RESULT: (all screenshots of all dml operations are already kept)

The process of entering information into the frame created by java code so that the data is reflected in the database using JDBC connectivity is done successfully.

11.DISCUSSION AND FUTURE WORK! :

The application till now done is a basic interface in which a user can enter his details and check the required persons report based on his interest. So this project can be used for fixed place i.e fixed start place and fixed destination place. So in future the project will be edited in such a manner that the age is calculated automatically based on the updated data set that is provided.

REFERENCES

1.http://sociallearningcommunity.com/10-of-the-best-mooc-providers/
2.https://en.wikipedia.org/wiki/List_of_MOOC_providers
3.https://github.com/sheelasairohith/dbma_assingment