

IRIS BASED AGE CLASSIFICATION SYSTEM

Abstract:

The average human eyeball is about one inch (25.4mm) in diameter, and weighs 0.25 ounces (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 segregation we are going to estimate the age of people using this software.

REQUIREMENT ANALYSIS

LIST OF TABLES:

- COMPANY
- RETINA_SCANNER
- RETINA_SCANNER_PREPARED BY
- SCAN
- PERSON
- REPORT

List of attributes with their domain types:

Company:

Company_id : number()

Name : varchar()

Address : varchar()

Rating : number()

Retina_scanner:

Scanner_id : number

Name : varchar()

Cost : number

Accuracy : number

Prepared_by:

Scanner_id : number

Company_id : number

Day : date

Person:

Person_id : number

Name : varchar()

Phone_no : number(10)

Address : varchar()

Scan:

Person_id : number

Scanner_id : number

Report_id : number

Report :

Report_id : number

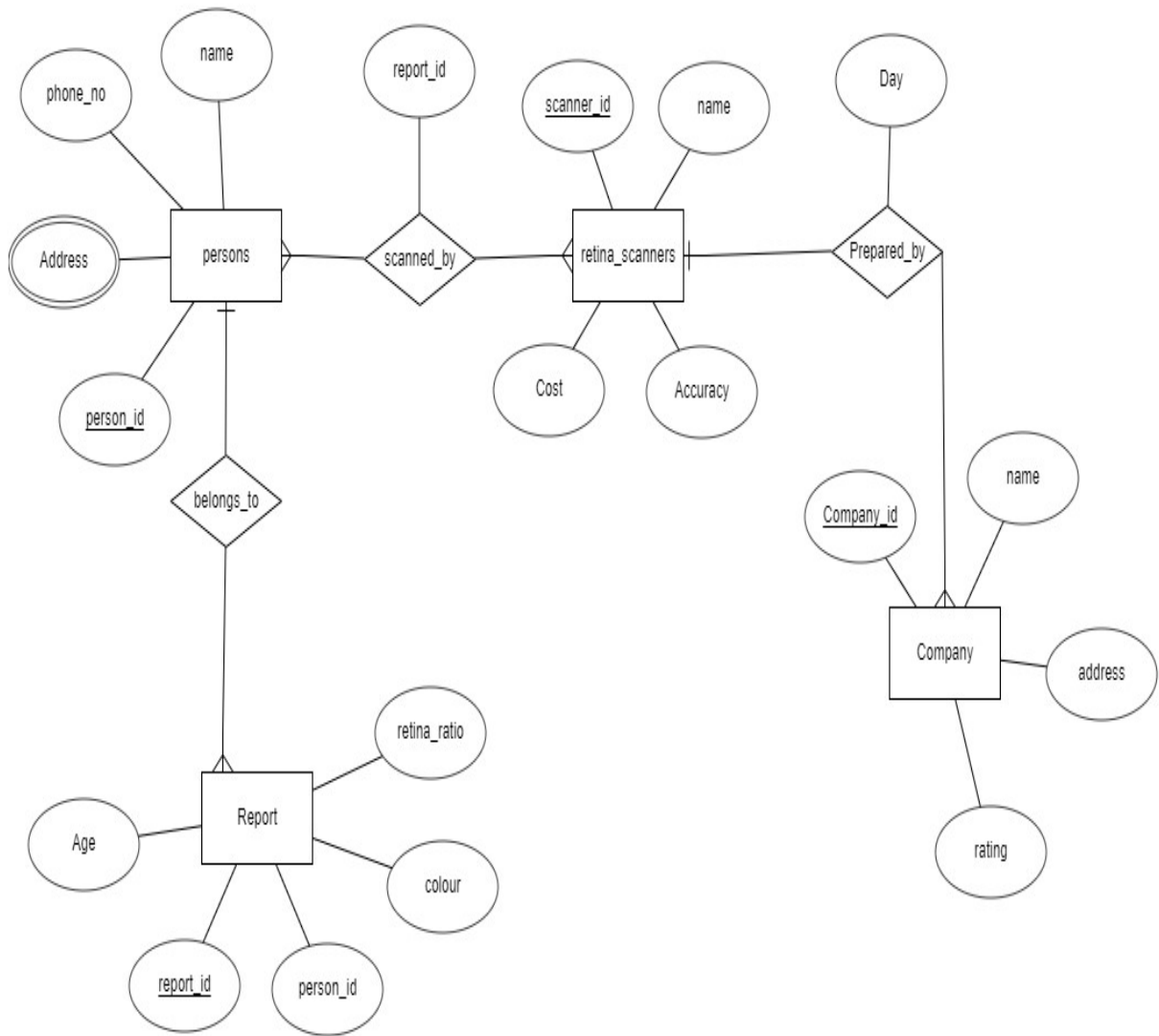
Person_id : number

Age : number

Colour : varchar()

Retina_ratio : number

ER diagram :



Mapping Cardinalities and Participation Constraints :

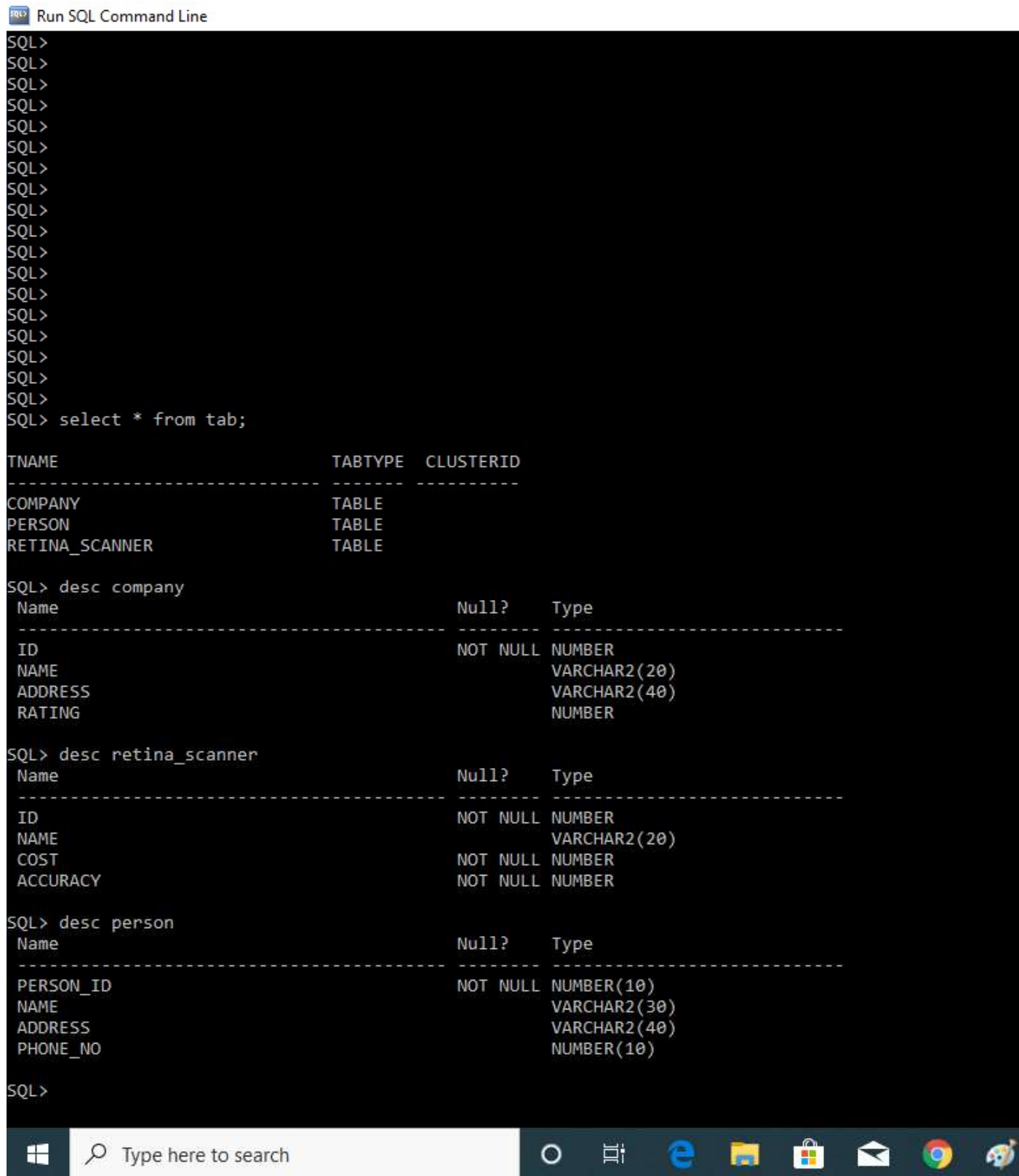
A company can prepare many retina scanners with different costs and different accuracy. But each retina scanner can be prepared by only one specific company only.

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.

Sql commands:



Run SQL Command Line

```
NAME                                VARCHAR2(30)
ADDRESS                             VARCHAR2(40)
PHONE_NO                             NUMBER(10)
```

```
SQL> create table scan(
  2  report_id number;
report_id number
  *
ERROR at line 2:
ORA-00907: missing right parenthesis
```

```
SQL> create table scan(
  2  report_id number,
  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> _
```

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>



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>



Type here to search



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
```



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                                         NOT NULL   VARCHAR2(20)
COST                                         NOT NULL   NUMBER
ACCURACY                                     NOT NULL   NUMBER
```

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

```
SQL>
```

```
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>
```

Run SQL Command Line

```
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> 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> _
```


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>
```

```
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> '
```

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)
```


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.
```


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.
```

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> _
```

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> _
```

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
1001	iris id	united states
95		
1002	cmi tech	korea
90		
1003	princeton identity	united states
85		

ID	NAME	ADDRESS
1004	sensor tech	united kingdom
80		
1005	argus	united kingdom
85		

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> _



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.
```



Type here to search



Run SQL Command Line

```
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> _

Type here to search

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>



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
1001	iris id	united states
1002	cmi tech	korea
1003	princeton identity	united states
1004	sensor tech	united kingdom
1005	argus	united kingdom

```
SQL> select * from person;
```

PERSON_ID	NAME	ADDRESS	PHONE_NO
1	sai	abc	7095716819
99	sampath	dvk	9381321423

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

DBMS ASSIGNMENT -1
Title: Iris based age classification system

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>
```

Windows taskbar with search bar and application icons.