SQL\*Plus: Release 10.2.0.1.0 - Production on Wed Mar 13 23:23:04 2024

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SQL> connect system

Enter password:

Connected.

SQL> create table sailor(sid number primary key,sname varchar(10),rating number,age number);

Table created.

SQL> create table boat(bid number primary key,bname varchar(10),color varchar(10));

Table created.

SQL> create table reserve(sid number,foreign key(sid) references sailor(sid),bid number,foreign key(bid) references boat(bid));

Table created.

SQL> desc reserve;

Name Null? Type

----------------------------------------- -------- ----------------------------

SID NUMBER

BID NUMBER

SQL> drop table reserve;

Table dropped.

SQL> create table reserve(sid number,foreign key(sid) references sailor(sid),bid number,foreign key(bid) references boat(bid),day date);

Table created.

SQL> desc reserve;

Name Null? Type

----------------------------------------- -------- ----------------------------

SID NUMBER

BID NUMBER

DAY DATE

SQL> desc reserve;

Name Null? Type

----------------------------------------- -------- ----------------------------

SID NUMBER

BID NUMBER

DAY DATE

SQL> alter table reserve add foreign key (bid) references boat(bid);

alter table reserve add foreign key (bid) references boat(bid)

\*

ERROR at line 1:

ORA-02275: such a referential constraint already exists in the table

SQL> alter table sailor modify age float;

Table altered.

SQL> desc sailor

Name Null? Type

----------------------------------------- -------- ----------------------------

SID NOT NULL NUMBER

SNAME VARCHAR2(10)

RATING NUMBER

AGE FLOAT(126)

SQL> insert into sailor values(&sid,'&sname',&rating,&age);

Enter value for sid: 22

Enter value for sname: Dustin

Enter value for rating: 7

Enter value for age: 45.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(22,'Dustin',7,45.0)

1 row created.

SQL> /

Enter value for sid: 29

Enter value for sname: Brutus

Enter value for rating: 1

Enter value for age: 33.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(29,'Brutus',1,33.0)

1 row created.

SQL> /

Enter value for sid: 31

Enter value for sname: Lubber

Enter value for rating: 8

Enter value for age: 55.5

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(31,'Lubber',8,55.5)

1 row created.

SQL> /

Enter value for sid: 32

Enter value for sname: Andy

Enter value for rating: 8

Enter value for age: 25.5

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(32,'Andy',8,25.5)

1 row created.

SQL> /

Enter value for sid: 58

Enter value for sname: Rusty

Enter value for rating: 10

Enter value for age: 35.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(58,'Rusty',10,35.0)

1 row created.

SQL> /

Enter value for sid: 64

Enter value for sname: Horatio

Enter value for rating: 7

Enter value for age: 35.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(64,'Horatio',7,35.0)

1 row created.

SQL> /

Enter value for sid: 71

Enter value for sname: Zorba

Enter value for rating: 10

Enter value for age: 16.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(71,'Zorba',10,16.0)

1 row created.

SQL> /

Enter value for sid: 74

Enter value for sname: Horatio

Enter value for rating: 9

Enter value for age: 35.0

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(74,'Horatio',9,35.0)

1 row created.

SQL> /

Enter value for sid: 85

Enter value for sname: Art

Enter value for rating: 3

Enter value for age: 25.5

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(85,'Art',3,25.5)

1 row created.

SQL> /

Enter value for sid: 95

Enter value for sname: Bob

Enter value for rating: 3

Enter value for age: 63.5

old 1: insert into sailor values(&sid,'&sname',&rating,&age)

new 1: insert into sailor values(95,'Bob',3,63.5)

1 row created.

SQL> select \* from sailor;

SID SNAME RATING AGE

---------- ---------- ---------- ----------

22 Dustin 7 45

29 Brutus 1 33

31 Lubber 8 55.5

32 Andy 8 25.5

58 Rusty 10 35

64 Horatio 7 35

71 Zorba 10 16

74 Horatio 9 35

85 Art 3 25.5

95 Bob 3 63.5

10 rows selected.

SQL> insert into boat values(&bid,'&bname','&color');

Enter value for bid: 101

Enter value for bname: Interlake

Enter value for color: Blue

old 1: insert into boat values(&bid,'&bname','&color')

new 1: insert into boat values(101,'Interlake','Blue')

1 row created.

SQL> /

Enter value for bid: 102

Enter value for bname: Interlake

Enter value for color: Red

old 1: insert into boat values(&bid,'&bname','&color')

new 1: insert into boat values(102,'Interlake','Red')

1 row created.

SQL> /

Enter value for bid: 103

Enter value for bname: Clipper

Enter value for color: Green

old 1: insert into boat values(&bid,'&bname','&color')

new 1: insert into boat values(103,'Clipper','Green')

1 row created.

SQL> /

Enter value for bid: 104

Enter value for bname: Marine

Enter value for color: Red

old 1: insert into boat values(&bid,'&bname','&color')

new 1: insert into boat values(104,'Marine','Red')

1 row created.

SQL> select \* from boat;

BID BNAME COLOR

---------- ---------- ----------

101 Interlake Blue

102 Interlake Red

103 Clipper Green

104 Marine Red

SQL> insert into reserve values(&sid,&bid,&day);

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10/10/98

old 1: insert into reserve values(&sid,&bid,&day)

new 1: insert into reserve values(22,101,10/10/98)

insert into reserve values(22,101,10/10/98)

\*

ERROR at line 1:

ORA-00932: inconsistent datatypes: expected DATE got NUMBER

SQL> /

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 1998-10-10

old 1: insert into reserve values(&sid,&bid,&day)

new 1: insert into reserve values(22,101,1998-10-10)

insert into reserve values(22,101,1998-10-10)

\*

ERROR at line 1:

ORA-00932: inconsistent datatypes: expected DATE got NUMBER

SQL> /

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 98-10-10

old 1: insert into reserve values(&sid,&bid,&day)

new 1: insert into reserve values(22,101,98-10-10)

insert into reserve values(22,101,98-10-10)

\*

ERROR at line 1:

ORA-00932: inconsistent datatypes: expected DATE got NUMBER

SQL> /

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10-10-98

old 1: insert into reserve values(&sid,&bid,&day)

new 1: insert into reserve values(22,101,10-10-98)

insert into reserve values(22,101,10-10-98)

\*

ERROR at line 1:

ORA-00932: inconsistent datatypes: expected DATE got NUMBER

SQL> insert into reserve values(&sid,&bid,'&day');

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10-10-98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'10-10-98')

insert into reserve values(22,101,'10-10-98')

\*

ERROR at line 1:

ORA-01843: not a valid month

SQL> insert into reserve values(&sid,&bid,'&day');

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 98-10-10

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'98-10-10')

insert into reserve values(22,101,'98-10-10')

\*

ERROR at line 1:

ORA-01847: day of month must be between 1 and last day of month

SQL> insert into reserve values(&sid,&bid,'&day');

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10-10-1998

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'10-10-1998')

insert into reserve values(22,101,'10-10-1998')

\*

ERROR at line 1:

ORA-01843: not a valid month

SQL> insert into reserve values(&sid,&bid,'&day');

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10-10-98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'10-10-98')

insert into reserve values(22,101,'10-10-98')

\*

ERROR at line 1:

ORA-01843: not a valid month

SQL> /

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 1998-10-10

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'1998-10-10')

insert into reserve values(22,101,'1998-10-10')

\*

ERROR at line 1:

ORA-01861: literal does not match format string

SQL> /

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 2021-10-22 13:54:19:55

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'2021-10-22 13:54:19:55')

insert into reserve values(22,101,'2021-10-22 13:54:19:55')

\*

ERROR at line 1:

ORA-01861: literal does not match format string

SQL> alter table modify day varchar(10);

alter table modify day varchar(10)

\*

ERROR at line 1:

ORA-00903: invalid table name

SQL> alter table reserve modify day varchar(10);

Table altered.

SQL> insert into reserve values(&sid,&bid,'&day');

Enter value for sid: 22

Enter value for bid: 101

Enter value for day: 10/10/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,101,'10/10/98')

1 row created.

SQL> /

Enter value for sid: 22

Enter value for bid: 102

Enter value for day: 10/10/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,102,'10/10/98')

1 row created.

SQL> /

Enter value for sid: 22

Enter value for bid: 103

Enter value for day: 10/8/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,103,'10/8/98')

1 row created.

SQL> /

Enter value for sid: 22

Enter value for bid: 104

Enter value for day: 10/7/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(22,104,'10/7/98')

1 row created.

SQL> /

Enter value for sid: 31

Enter value for bid: 102

Enter value for day: 11/10/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(31,102,'11/10/98')

1 row created.

SQL> /

Enter value for sid: 31

Enter value for bid: 103

Enter value for day: 11/06/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(31,103,'11/06/98')

1 row created.

SQL> /

Enter value for sid: 31

Enter value for bid: 104

Enter value for day: 11/12/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(31,104,'11/12/98')

1 row created.

SQL> /

Enter value for sid: 64

Enter value for bid: 101

Enter value for day: 09/05/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(64,101,'09/05/98')

1 row created.

SQL> /

Enter value for sid: 64

Enter value for bid: 102

Enter value for day: 09/08/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(64,102,'09/08/98')

1 row created.

SQL> /

Enter value for sid: 74

Enter value for bid: 103

Enter value for day: 09/08/98

old 1: insert into reserve values(&sid,&bid,'&day')

new 1: insert into reserve values(74,103,'09/08/98')

1 row created.

SQL> select \* from reserve;

SID BID DAY

---------- ---------- ----------

22 101 10/10/98

22 102 10/10/98

22 103 10/8/98

22 104 10/7/98

31 102 11/10/98

31 103 11/06/98

31 104 11/12/98

64 101 09/05/98

64 102 09/08/98

74 103 09/08/98

10 rows selected.

SQL> update table reserve set day='10/08/98' where sid=22 and bid=103;

update table reserve set day='10/08/98' where sid=22 and bid=103

\*

ERROR at line 1:

ORA-00903: invalid table name

SQL> update reserve set day='10/08/98' where sid=22 and bid=103;

1 row updated.

SQL> select \* from reserve;

SID BID DAY

---------- ---------- ----------

22 101 10/10/98

22 102 10/10/98

22 103 10/08/98

22 104 10/7/98

31 102 11/10/98

31 103 11/06/98

31 104 11/12/98

64 101 09/05/98

64 102 09/08/98

74 103 09/08/98

10 rows selected.

SQL> update table reserve set day='10/07/98' where sid=22 and bid=104;

update table reserve set day='10/07/98' where sid=22 and bid=104

\*

ERROR at line 1:

ORA-00903: invalid table name

SQL> update reserve set day='10/07/98' where sid=22 and bid=104;

1 row updated.

SQL> select \* from reserve;

SID BID DAY

---------- ---------- ----------

22 101 10/10/98

22 102 10/10/98

22 103 10/08/98

22 104 10/07/98

31 102 11/10/98

31 103 11/06/98

31 104 11/12/98

64 101 09/05/98

64 102 09/08/98

74 103 09/08/98

10 rows selected.

SQL> select \* from sailor;

SID SNAME RATING AGE

---------- ---------- ---------- ----------

22 Dustin 7 45

29 Brutus 1 33

31 Lubber 8 55.5

32 Andy 8 25.5

58 Rusty 10 35

64 Horatio 7 35

71 Zorba 10 16

74 Horatio 9 35

85 Art 3 25.5

95 Bob 3 63.5

10 rows selected.

SQL> select \* from boat;

BID BNAME COLOR

---------- ---------- ----------

101 Interlake Blue

102 Interlake Red

103 Clipper Green

104 Marine Red

SQL> select \* from reserve;

SID BID DAY

---------- ---------- ----------

22 101 10/10/98

22 102 10/10/98

22 103 10/08/98

22 104 10/07/98

31 102 11/10/98

31 103 11/06/98

31 104 11/12/98

64 101 09/05/98

64 102 09/08/98

74 103 09/08/98

10 rows selected.

SQL> select sname from sailor;

SNAME

----------

Dustin

Brutus

Lubber

Andy

Rusty

Horatio

Zorba

Horatio

Art

Bob

10 rows selected.

SQL> select distinct(sname) from sailor;

SNAME

----------

Rusty

Lubber

Brutus

Andy

Art

Bob

Dustin

Zorba

Horatio

9 rows selected.

SQL> select distinct sname from sailor;

SNAME

----------

Rusty

Lubber

Brutus

Andy

Art

Bob

Dustin

Zorba

Horatio

9 rows selected.

SQL> select \* from sailor natural join reserve;

SID SNAME RATING AGE BID DAY

---------- ---------- ---------- ---------- ---------- ----------

22 Dustin 7 45 101 10/10/98

22 Dustin 7 45 102 10/10/98

22 Dustin 7 45 103 10/08/98

22 Dustin 7 45 104 10/07/98

31 Lubber 8 55.5 102 11/10/98

31 Lubber 8 55.5 103 11/06/98

31 Lubber 8 55.5 104 11/12/98

64 Horatio 7 35 101 09/05/98

64 Horatio 7 35 102 09/08/98

74 Horatio 9 35 103 09/08/98

10 rows selected.

SQL> select \* from sailor natural join reserve where bid=101;

SID SNAME RATING AGE BID DAY

---------- ---------- ---------- ---------- ---------- ----------

22 Dustin 7 45 101 10/10/98

64 Horatio 7 35 101 09/05/98

SQL> select \* from sailor natural join reserve natural join boat where bid=101;

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

101 22 Dustin 7 45 10/10/98 Interlake

Blue

101 64 Horatio 7 35 09/05/98 Interlake

Blue

SQL> select sname from reserve natural join sailor;

SNAME

----------

Dustin

Dustin

Dustin

Dustin

Lubber

Lubber

Lubber

Horatio

Horatio

Horatio

10 rows selected.

SQL> select distinct sname from reserve natural join sailor;

SNAME

----------

Lubber

Dustin

Horatio

SQL> select sname from reserve natural join sailor natural join boat where color='Red';

SNAME

----------

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Lubber

Lubber

Lubber

SNAME

----------

Lubber

Lubber

Lubber

Horatio

Horatio

Horatio

Horatio

Horatio

Horatio

20 rows selected.

SQL> select sname from sailor natural join reserve natural join boat where color='Red';

SNAME

----------

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Lubber

Lubber

Lubber

SNAME

----------

Lubber

Lubber

Lubber

Horatio

Horatio

Horatio

Horatio

Horatio

Horatio

20 rows selected.

SQL> select sname from sailor natural join reserve natural join boat;

SNAME

----------

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

Dustin

SNAME

----------

Dustin

Dustin

Dustin

Dustin

Dustin

Lubber

Lubber

Lubber

Lubber

Lubber

Lubber

SNAME

----------

Lubber

Lubber

Lubber

Lubber

Lubber

Lubber

Horatio

Horatio

Horatio

Horatio

Horatio

SNAME

----------

Horatio

Horatio

Horatio

Horatio

Horatio

Horatio

Horatio

40 rows selected.

SQL> select \* from sailor natural join reserve natural join boat;

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

104 22 Dustin 7 45 10/07/98 Marine

Red

103 22 Dustin 7 45 10/08/98 Clipper

Green

102 22 Dustin 7 45 10/10/98 Interlake

Red

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

101 22 Dustin 7 45 10/10/98 Interlake

Blue

104 31 Lubber 8 55.5 11/12/98 Marine

Red

103 31 Lubber 8 55.5 11/06/98 Clipper

Green

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

102 31 Lubber 8 55.5 11/10/98 Interlake

Red

102 64 Horatio 7 35 09/08/98 Interlake

Red

101 64 Horatio 7 35 09/05/98 Interlake

Blue

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

103 74 Horatio 9 35 09/08/98 Clipper

Green

10 rows selected.

SQL> select \* from sailor natural join reserve;

SID SNAME RATING AGE BID DAY

---------- ---------- ---------- ---------- ---------- ----------

22 Dustin 7 45 101 10/10/98

22 Dustin 7 45 102 10/10/98

22 Dustin 7 45 103 10/08/98

22 Dustin 7 45 104 10/07/98

31 Lubber 8 55.5 102 11/10/98

31 Lubber 8 55.5 103 11/06/98

31 Lubber 8 55.5 104 11/12/98

64 Horatio 7 35 101 09/05/98

64 Horatio 7 35 102 09/08/98

74 Horatio 9 35 103 09/08/98

10 rows selected.

SQL> select \* from sailor natural join reserve natural join boat;

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

104 22 Dustin 7 45 10/07/98 Marine

Red

103 22 Dustin 7 45 10/08/98 Clipper

Green

102 22 Dustin 7 45 10/10/98 Interlake

Red

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

101 22 Dustin 7 45 10/10/98 Interlake

Blue

104 31 Lubber 8 55.5 11/12/98 Marine

Red

103 31 Lubber 8 55.5 11/06/98 Clipper

Green

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

102 31 Lubber 8 55.5 11/10/98 Interlake

Red

102 64 Horatio 7 35 09/08/98 Interlake

Red

101 64 Horatio 7 35 09/05/98 Interlake

Blue

BID SID SNAME RATING AGE DAY BNAME

---------- ---------- ---------- ---------- ---------- ---------- ----------

COLOR

----------

103 74 Horatio 9 35 09/08/98 Clipper

Green

10 rows selected.

SQL> select \* from sailor natural join reserve;

SID SNAME RATING AGE BID DAY

---------- ---------- ---------- ---------- ---------- ----------

22 Dustin 7 45 101 10/10/98

22 Dustin 7 45 102 10/10/98

22 Dustin 7 45 103 10/08/98

22 Dustin 7 45 104 10/07/98

31 Lubber 8 55.5 102 11/10/98

31 Lubber 8 55.5 103 11/06/98

31 Lubber 8 55.5 104 11/12/98

64 Horatio 7 35 101 09/05/98

64 Horatio 7 35 102 09/08/98

74 Horatio 9 35 103 09/08/98

10 rows selected.

SQL> select \* from sailor,reserve,boat where resrve.sid=sailor.sid and ;