**SQL OPERATION FOR TABLE SAILOR**

**CREATION:**

SQL> create table sailor

2 (

3 s\_id varchar2(5) primary key,

4 s\_name varchar2(6),

5 rating number(5),

6 age number(3)

7 );

Table created.

**DESCRIPTION:**

SQL> desc sailor;

Name Null? Type

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

S\_ID NOT NULL VARCHAR2(5)

S\_NAME VARCHAR2(10)

RATING NUMBER(5)

AGE NUMBER(3)

**INSERTION:**

SQL> insert into sailor values('S01','TOM',3,25);

1 row created.

SQL> insert into sailor values('S02','BIBRO',1,20);

1 row created.

SQL> insert into sailor values('S03','HIBRU',5,23);

1 row created.

SQL> insert into sailor values('S04','VISION',2,35);

1 row created.

SQL> insert into sailor values('S05','TONY',5,40);

1 row created.

SQL> insert into sailor values('S06','BRUCE',4,32);

1 row created.

SQL> insert into sailor values('S07','THOR',4,41);

1 row created.

**SQL OPERATION FOR TABLE BOATS**

**CREATION:**

SQL> create table boats

2 (

3 b\_id varchar2(5) primary key,

4 b\_name varchar2(8),

5 b\_colours varchar2(8)

6 );

Table created.

**DESCRIPTION:**

SQL> desc boats;

Name Null? Type

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

B\_ID NOT NULL VARCHAR2(5)

B\_NAME VARCHAR2(10)

B\_COLOURS VARCHAR2(8**)**

**INSERTION:**

SQL> insert into boats values('B01','BOAT1','BLACK');

1 row created.

SQL> insert into boats values('B02','BOAT2','RED');

1 row created.

SQL> insert into boats values('B03','BOAT3','GREEN');

1 row created.

SQL> insert into boats values('B04','BOAT4','PINK');

1 row created.

SQL> insert into boats values('B05','BOAT5','RED');

1 row created.

SQL> insert into boats values('B06','BOAT6','PURPLE');

1 row created.

SQL> insert into boats values('B07','BOAT7','BLUE');

1 row created.

**SQL OPERATION FOR TABLE RESERVES**

**CREARTION:**

SQL> create table reserves

2 (

3 s\_id varchar2(5),

4 b\_id varchar2(5),

5 day varchar2(10)

6 );

Table created.

**DESCRIPTION:**

SQL> desc reserves;

Name Null? Type

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

S\_ID VARCHAR2(5)

B\_ID VARCHAR2(5)

DAY VARCHAR2(10)

**INSERTION:**

SQL> insert into reserves values('S01','B03','WEDNESDAY');

1 row created.

SQL> insert into reserves values('S01','B01','TEUSDAY');

1 row created.

SQL> insert into reserves values('S03','B02','SUNDAY');

1 row created.

SQL> insert into reserves values('S02','B06','MONDAY');

1 row created.

SQL> insert into reserves values('S02','B07','TEUSDAY');

1 row created.

SQL> insert into reserves values('S04','B05','THURSDAY');

1 row created.

SQL> insert into reserves values('S02','B01','MONDAY');

1 row created.

SQL> insert into reserves values('S02','B02','TEUSDAY');

1 row created.

SQL> insert into reserves values('S02','B03','WEDNESDAY');

1 row created.

SQL> insert into reserves values('S02','B04','THURSDAY');

1 row created.

SQL> insert into reserves values('S02','B05','FRIDAY');

1 row created.

SQL> insert into reserves values('S05','B06','SATURDAY');

1 row created.

SQL> insert into reserves values('S06','B07','SUNDAY');

1 row created.

SQL> insert into reserves values('S07','B05','MONDAY');

1 row created.

**QUERIES:**

**1) Find the average age of sailors for each rating levels that has atleast 2 such sailors.**

SQL> select avg(age) "AVERAGE AGE" from sailor group by rating

having count(rating)>=2;

AVERAGE AGE

-----------

36.5

31.5

**2)** **Find s\_id of all the sailors who have reserved red boats but not green boats.**

SQL> select s\_id from boats b, reserves r where b.b\_id=r.b\_id

and b\_colourS like 'RED' minus (select s\_id from boats b,

reserves r where b.b\_id=r.b\_id and b\_colours like 'GREEN');

S\_ID

-----

S03

S04

S07

**3) Find the names of sailor who reserved all boats.**

SQL> select s.s\_name from sailor s where not exists(select b.b\_id from boats b

minus select r.b\_id from reserves r where r.s\_id = s.s\_id);

S\_NAME

------

BIBRO

4) **Find the s\_id and name who have reserved boat on Teusday.**

SQL> select distinct s.s\_id,s\_name from sailor s, reserves r where s.s\_id

=r.s\_id and day like 'TEUSDAY';

S\_ID S\_NAME

----- ------

S01 TOM

S02 BIBRO

**5)** **List b\_id and the names for red and green colours only.**

SQL> select b\_id,b\_name from boats where b\_colours in('RED','GREEN');

B\_ID B\_NAME

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

B02 BOAT2

B03 BOAT3

B05 BOAT5

**VISUAL BASIC CODE FOR TABLE SAILOR**

**Variable Declaration:**

Dim CN As ADODB.Connection

Dim CMD As ADODB.Command

Dim S As String

Dim RS As ADODB.Recordset

Dim ID As String

**Back Button:**

Private Sub CMDBACK\_Click()

FORM\_MENU.Show

End Sub

**Exit Button:**

Private Sub CMDEXIT\_Click()

End

End Sub

Private Sub CMDFIRST\_Click()

RS.MoveFirst

DISPLAY

MsgBox "YOU ARE IN THE FIRST RECORD"

End Sub

**Input Button:**

Private Sub CMDINPUT\_Click()

If (Val(T1.Text) >= 1 And Val(T1.Text) <= 50) Then

S = "INSERT INTO SAILORS1(S\_ID,S\_NAME,RATING,AGE)VALUES(" + T1.Text + ",'" + T2.Text + "'," + T3.Text + "," + T5.Text + ")"

CMD.ActiveConnection = CN

CMD.CommandText = S

CMD.Execute

MsgBox "SUCCESSFULLY INSERTED"

Else

MsgBox "ENTER S\_ID BETWEEN 1 AND 50"

T1.Text = ""

T1.SetFocus

End If

End Sub

Private Sub CMDLAST\_Click()

If RS.EOF = False Then

RS.MoveLast

DISPLAY

MsgBox "YOU ARE IN THE LAST RECORD"

End If

End Sub

**Next Button:**

Private Sub CMDNEXT\_Click()

If RS.EOF = False Then

RS.MoveNext

DISPLAY

Else

RS.MoveLast

MsgBox "YOU ARE IN THE LAST RECORD"

End If

End Sub

**Previous Button:**

Private Sub CMDPREVIOUS\_Click()

If RS.BOF = False Then

RS.MovePrevious

DISPLAY

Else

RS.MoveFirst

MsgBox "YOU ARE IN THE FIRST RECORD"

End If

End Sub

**View Button:**

Private Sub CMDVIEW\_Click()

SAILORS\_VIEW.Show

Unload Me

End Sub

**For connection of oracle and VB:**

Private Sub Form\_Load()

Set CN = New ADODB.Connection

Set CMD = New ADODB.Command

Set RS = New ADODB.Recordset

CN.Open "DSN=ABC;UID=SCOTT;PWD=tiger"

RS.Open "SAILORS", CN, adOpenDynamic, adLockOptimistic

End Sub

Private Sub T1\_KeyPress(KeyAscii As Integer)

If (KeyAscii >= Asc("A") And KeyAscii <= Asc("Z")) Then

MsgBox "ENTER ONLY NUMBERS"

KeyAscii = 0

End If

End Sub

Private Sub T4\_Change()

T5.Text = T4.Value

End Sub

Private Sub DISPLAY()

If (RS.EOF = False And RS.BOF = False) Then

T1.Text = RS("S\_ID")

T2.Text = RS("S\_NAME")

T3.Text = CStr(RS("RATING"))

T5.Text = CStr(RS("AGE"))

End If

End Sub

**SAILORS1 VIEW:**

Private Sub CMDBACK\_Click()

FORM\_SAILORS.Show

End Sub

**Exit Button:**

Private Sub CMDEXIT\_Click()

End

End Sub

**VISUAL BASIC CODE FOR TABLE BOATS**

**TABLE BOATS1:**

**Variable Declaration:**

Dim CN As ADODB.Connection, CMD As ADODB.Command

Dim S As String

Dim RS As ADODB.Recordset

Dim ID As String

**Back Button:**

Private Sub CMDBACK\_Click()

FORM\_MENU.Show

Unload Me

End Sub

**Exit Button:**

Private Sub CMDEXIT\_Click()

End

End Sub

**Input Button:**

Private Sub CMDINPUT\_Click()

S = "INSERT INTO BOATS1(B\_ID,B\_NAME,B\_COLOUR)VALUES('" + T1.Text + "','" + T2.Text + "','" + T3.Text + "')"

CMD.ActiveConnection = CN

CMD.CommandText = S

CMD.Execute

MsgBox "SUCCESSFULLY INSERTED"

End Sub

**View Button:**

Private Sub CMDVIEW\_Click()

BOATS\_VIEW.Show

Unload Me

End Sub

**For connection of oracle and VB:**

Private Sub Form\_Load()

OPT\_RED.Value = False

OPT\_GREEN.Value = False

OPT\_BLUE.Value = False

OPT\_BLACK.Value = False

Set CN = New ADODB.Connection

Set CMD = New ADODB.Command

Set RS = New ADODB.Recordset

CN.Open "DSN=ABC;UID=scott;PWD=tiger"

RS.Open "BOATS", CN, adOpenDynamic, adLockOptimistic

End Sub

Private Sub OPT\_BLACK\_Click()

T3.Text = OPT\_BLACK.Caption

End Sub

Private Sub OPT\_BLUE\_Click()

T3.Text = OPT\_BLUE.Caption

End Sub

Private Sub OPT\_GREEN\_Click()

T3.Text = OPT\_GREEN.Caption

End Sub

Private Sub OPT\_RED\_Click()

T3.Text = OPT\_RED.Caption

End Sub

**BOATS1 VIEW:**

Private Sub CMDBACK\_Click()

FORM\_BOATS.Show

End Sub

Private Sub CMDEXIT\_Click()

End

End Sub

**VISUAL BASIC CODE FOR TABLE RESERVES**

**TABLE RESERVES1:**

**Variable Declaration:**

Dim CN As ADODB.Connection, CMD As ADODB.Command

Dim S As String

Dim RS As ADODB.Recordset

Dim ID As String

Private Sub CMDBACK\_Click(Index As Integer)

FORM\_MENU.Show

End Sub

Private Sub CMDEXIT\_Click()

End

End Sub

**Input Box:**

Private Sub CMDINPUT\_Click()

If (Val(T1.Text) >= 1 And Val(T1.Text) <= 50) Then

S = "INSERT INTO RESERVES1(S\_ID,B\_ID,DAY)VALUES(" + T1.Text + ",'" + T2.Text + "','" + Combo1.Text + "')"

CMD.ActiveConnection = CN

CMD.CommandText = S

CMD.Execute

MsgBox "SUCCESSFULLY INSERTED"

Else

MsgBox "ENTER S\_ID BETWEEN 1 AND 50"

T1.Text = ""

T1.SetFocus

End If

End Sub

Private Sub CMDVIEW\_Click()

RESERVES\_VIEW.Show

Unload Me

End Sub

Private Sub Form\_Load()

Set CN = New ADODB.Connection

Set CMD = New ADODB.Command

Set RS = New ADODB.Recordset

CN.Open "DSN=ABC;UID=scott;PWD=tiger"

RS.Open "RESERVES", CN, adOpenDynamic, adLockOptimistic

End Sub

**RESERVES1 VIEW:**

Private Sub CMDBACK\_Click()

FORM\_RESERVES.Show

End Sub

Private Sub CMDEXIT\_Click()

End

End Sub