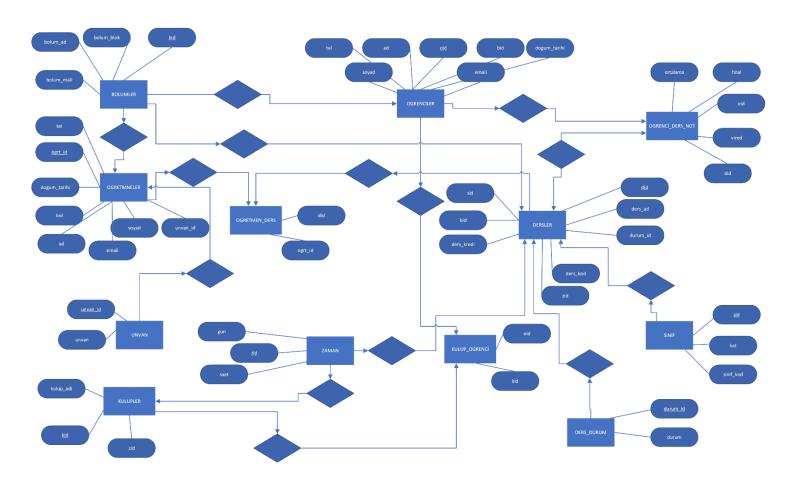
SEMA YALÇIN

ÖĞRENCİ YÖNETİM SİSTEMİ VERİTABANI

1. E-R diagram



2. Tabloların oluşturulması

```
create table bolumler (
bid number(3) primary key,
bolum_ad varchar2(40),
bolum blok char(2),
bolum_mail varchar2(40));
create table ogrenciler (
oid number(3) primary key,
ad varchar2(20),
soyad varchar2(20),
dogum tarihi date,
tel char(11),
email varchar2(40),
bid number(3) references bolumler(bid));
create table sinif (
sid number(3) primary key,
sinif_kod number(3),
kat number(3));
create table zaman (
zid number(3) primary key,
gun varchar2(20),
saat varchar2(20));
create table ders_durum (
durum_id number(3) primary key,
durum varchar2(40));
```

```
SQL Plus
SQL> create table bolumler (
 2 bid number(3) primary key,
 3 bolum_ad varchar2(40),
 4 bolum_blok char(2),
 5 bolum_mail varchar2(40));
Table created.
SQL> create table ogrenciler (
 2 oid number(3) primary key,
 3 ad varchar2(20),
 4 soyad varchar2(20),
 5 dogum_tarihi date,
 6 tel char(11),
 7 email varchar2(40),
 8 bid number(3) references bolumler(bid));
Table created.
SQL> create table sinif (
 2 sid number(3) primary key,
 3 sinif_kod number(3),
 4 kat number(3));
Table created.
SQL> create table zaman (
 2 zid number(3) primary key,
 3 gun varchar2(20),
 4 saat varchar2(20));
Table created.
SQL> create table ders_durum (
 2 durum_id number(3) primary key,
 3 durum varchar2(40));
Table created.
```

```
create table unvan (
unvan id number(3) primary key,
unvan varchar2(40));
create table dersler (
did number(3) primary key,
ders_kod char(6),
ders ad varchar2(40),
ders kredi number(3),
bid number(3) references bolumler(bid),
sid number(3) references sinif(sid),
zid number(3) references zaman(zid),
durum id number(3) references
ders_durum(durum_id));
create table ogrenci_ders_not (
oid number(3) references ogrenciler(oid),
did number(3) references dersler(did),
vize float,
final float,
ortalama float);
create table ogretmenler (
ogrt_id number(3) primary key,
ad varchar2(20),
soyad varchar2(20),
dogum_tarihi date,
tel char(11),
email varchar2(40),
bid number(3) references bolumler(bid),
unvan_id number(3) references unvan(unvan_id));
create table ogretmen ders (
ogrt id number(3) references ogretmenler(ogrt id),
did number(3) references dersler(did));
```

```
SQL> create table unvan (
2 unvan_id number(3) primary key,
3 unvan varchar2(40));

Table created.

SQL> create table dersler (
2 did number(3) primary key,
3 ders_kod char(6),
4 ders_ad varchar2(40),
5 ders_kredi number(3),
6 bid number(3) references bolumler(bid),
7 sid number(3) references sinif(sid),
8 zid number(3) references ders_durum(durum_id));

Table created.

SQL> create table ogrenci_ders_not (
2 oid number(3) references ogrenciler(oid),
3 did number(3) references dersler(did),
4 vize float,
5 final float,
6 ortalama float);

Table created.

SQL> create table ogretmenler (
2 ogrt_id number(3) primary key,
3 ad varchar2(20),
4 soyad varchar2(20),
5 dogum_tarihi date,
6 tel char(11),
7 email varchar2(40),
8 bid number(3) references bolumler(bid),
9 unvan_id number(3) references unvan(unvan_id));

Table created.

SQL> create table ogretmen_ders (
2 ogrt_id number(3) references unvan(unvan_id));

Table created.
```

```
create table kulupler (
kid number(3) primary key,
kulup_adi varchar2(40),
zid number(3) references zaman(zid));

create table kulup_ogrenci (
oid number(3) references ogrenciler(oid),
kid number(3) references kulupler(kid));
```

```
3. procedure ile tablolara veri girişi yapılması
```

```
create or replace procedure INSERT BOLUMLER
 bid IN NUMBER,
 bolum ad IN VARCHAR2,
 bolum blok IN CHAR,
 bolum_mail IN VARCHAR2)
is
begin
 insert into bolumler values (bid, bolum ad,
bolum blok, bolum mail);
 commit;
end;
/
SET SERVEROUTPUT ON
DECLARE
 bid NUMBER;
 bolum_ad VARCHAR2(40);
 bolum_blok CHAR(2);
 bolum_mail VARCHAR2(40);
BEGIN
 bid:=&bid;
 bolum ad:=&bolum ad;
 bolum blok:=&bolum blok;
 bolum mail:=&bolum mail;
 INSERT_BOLUMLER(bid, bolum_ad, bolum_blok, bolum_mail);
```

```
SQL Plus
           reate or replace procedure INSERT_BOLUMLER (
             bid IN NUMBER.
            bolum_ad IN VARCHAR2,
bolum_blok IN CHAR,
bolum_mail IN VARCHAR2)
       begin
             insert into bolumler values (bid, bolum_ad, bolum_blok, bolum_mail);
             commit;
rocedure created.
SQL> SET SERVEROUTPUT ON
            bid NUMBER:
            bolum_ad VARCHAR2(40);
bolum_blok CHAR(2);
bolum_mail VARCHAR2(40);
       BEGIN
            bid:=&bid;
            bolum_ad:=&bolum_ad;
bolum_blok:=&bolum_blok;
             bolum_mail:=&bolum_mail;
INSERT_BOLUMLER(bid, bolum_ad, bolum_blok, bolum_mail);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
         value for bid: 1
7: bid:=&bid;
         7: bid:=1; value for bolum_ad: 'Bilgisayar Muhendisligi'
enter value for bolum_ad: Bilgisayar Munendisil
old 8: bolum_ad:=&bolum_ad;
new 8: bolum_ad:='Bilgisayar Muhendisligi';
Enter value for bolum_blok: 'A'
old 9: bolum_blok:=&bolum_blok;
old
old
        9: bolum_blok:='A';
value for bolum_mail: 'bil@imu.edu.tr'
10: bolum_mail:=&bolum_mail;
10: bolum_mail:='bil@imu.edu.tr';
KAYIT BASARILIYLA EKLENDİ
PL/SQL procedure successfully completed.
```

```
Enter value for bid: 2
             bid:=&bid;
old 7:
new
             bid:=2;
Enter value for bolum_ad: 'Makine Muhendisligi'
old 8:
             bolum_ad:=&bolum_ad;
new 8: bolum_ad:='Makine Muhendisligi';
Enter value for bolum_blok: 'A'
             bolum blok:=&bolum blok;
old 9:
new 9: bolum_blok:='A';
Enter value for bolum_mail: 'mak@imu.edu.tr'
             bolum_mail:=&bolum_mail;
old 10:
             bolum_mail:='mak@imu.edu.tr';
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

END;

DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');

```
Enter value for bid: 3
             bid:=&bid;
 old
             bid:=3;
 Enter value for bolum_ad: 'Matematik Muhendisligi'
             bolum_ad:=&bolum_ad;
 old 8:
 new 8:
             bolum_ad:='Matematik Muhendisligi';
 Enter value for bolum_blok: 'A'
             bolum_blok:=&bolum_blok;
 old 9:
 new 9: bolum_blok:='A';
Enter value for bolum_mail: 'mat@imu.edu.tr'
 new
 old 10:
             bolum_mail:=&bolum_mail;
 new 10:
             bolum mail:='mat@imu.edu.tr';
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
Enter value for bid: 4
old
              bid:=&bid;
new
              bid:=4;
Enter value for bolum_ad: 'Tip'
              bolum_ad:=&bolum_ad;
old
      8:
new 8: bolum_ad:='Tip';
Enter value for bolum_blok: 'B'
              bolum_blok:=&bolum_blok;
old
new 9: bolum_blok:='B';
Enter value for bolum_mail: 'tip@imu.edu.tr'
              bolum_mail:=&bolum_mail;
old 10:
              bolum mail:='tip@imu.edu.tr';
new
     10:
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT_OGRENCILER (
```

```
oid IN NUMBER,
 ad IN VARCHAR2,
 soyad IN VARCHAR2,
 dogum tarihi IN VARCHAR2,
 tel IN CHAR,
 email IN VARCHAR2,
 bid IN NUMBER)
is
                                        bid);
begin
 insert into ogrenciler values (oid, ad,
soyad, to date(dogum tarihi,
'dd/mm/yyyy'), tel, email, bid);
 commit;
end;
SET SERVEROUTPUT ON
DECLARE
 oid NUMBER;
 ad VARCHAR2(20);
 soyad VARCHAR2(20);
 dogum tarihi VARCHAR2(10);
 tel CHAR(11);
 email VARCHAR2(40);
 bid NUMBER;
BEGIN
 oid:=&oid;
 ad:=&ad;
 soyad:=&soyad;
 dogum_tarihi:=&dogum_tarihi;
 tel:=&tel;
 email:=&email;
 bid:=&bid;
 dogum tarihi:=TO CHAR(TO DATE(
dogum_tarihi, 'dd/mm/yyyy'), 'dd/mm/yyyy');
 INSERT_OGRENCILER(oid, ad, soyad,
dogum tarihi, tel, email, bid);
 DBMS_OUTPUT.PUT_LINE(
'KAYIT BASARILIYLA EKLENDİ.');
END:
```

```
SQL> create or replace procedure INSERT_OGRENCILER (
2 oid IN NUMBER,
3 ad IN VARCHAR2,
           soyad IN VARCHAR2,
dogum_tarihi IN VARCHAR2,
           tel IN CHAR,
email IN VARCHAR2,
           bid IN NUMBER)
     begin
            insert into ogrenciler values (oid, ad, soyad, to_date(dogum_tarihi, 'dd/mm/yyyy'), tel, email,
Procedure created.
SQL> SET SERVEROUTPUT ON
QL> DECLARE
           oid NUMBER;
           ad VARCHAR2(20);
soyad VARCHAR2(20);
dogum_tarihi VARCHAR2(10);
           tel CHAR(11);
email VARCHAR2(40);
           bid NUMBER:
      BEGIN
oid:=&oid;
           old:=&old;
ad:=&ad;
soyad:=&soyad;
dogum_tarihi:=&dogum_tarihi;
tel:=&tel;
            email:=&email;
           email:=kemail;
bid:=&bid;
dogum_tarihi:=TO_CHAR(TO_DATE(dogum_tarihi, 'dd/mm/yyyy'), 'dd/mm/yyyy');
INSERT_OGRENCILER(oid, ad, soyad, dogum_tarihi, tel, email, bid);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDÎ.');
```

```
Enter value for old: 2
old 10: oid:=&oid;
new 10: oid:=2;
Enter value for ad: 'Ahmet'
old 11: ad:='Ahmet';
new 11: ad:='Ahmet';
Fator value for soyad: 'Kaya'
Enter value for oid: 1
old 10: oid:=&oid;
new 10: oid:=1;
Enter value for ad: 'Ayse'
old 11:
new 11:
                             ad:=&ad:
old 11: ad:=kad;
new 11: ad:='Ayse';
Enter value for soyad: 'Yilmaz'
old 12: soyad:=&soyad;
new 12: soyad:='Yilmaz';
                                                                                                                             The for soyad: 'Kaya'
old 12: soyad:=&soyad;
new 12: soyad:='Kaya';
Enter value for dogum_tarihi: '10/02/2001'
new 12: soyad:= Y11maZ;
Enter value for dogum_tarihi: '01/01/2002'
old 13: dogum_tarihi:=&dogum_tarihi;
new 13: dogum_tarihi:='01/01/2002';
Enter value for tel: '05369874520'
old 14: tel:=&tel;
new 14: tel:='05369874520':
                                                                                                                                       13: dogum_tarihi:=&dogum_tarihi;
13: dogum_tarihi:='10/02/2001';
                                                                                                                               Enter value for tel: '05478469852'
old 14: tel:=&tel;
new 14: tel:='05478469852';
oid 14: tel:≅atel;
new 14: tel:='05369874520';
Enter value for email: 'ayseyilmaz@gmail.com'
                                                                                                                             new 14: tel:= '054/8469852';
Enter value for email: 'ahmetkaya@gmail.com'
old 15: email:=&email;
new 15: email:='ahmetkaya@gmail.com';
Enter value for bid: 1
         15: email:=&email;
15: email:='ayseyilmaz@gmail.com';
Enter value for bid: 2 old 16: bid:=&bid;
                                                                                                                             old 16: bid:=&bid;
new 16: bid:=1;
KAYIT BASARILIYLA EKLENDİ.
new 16: bid:=2;
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
                                                                                                                               PL/SQL procedure successfully completed.
```

```
Enter value for oid: 3
old 10: oid:=&oid;
new 10: oid:=3;
Enter value for ad: 'Betul'
old 11: ad:=&ad;
new 11: ad:='Betul';
Enter value for soyad: 'Yalcin'
old 12: soyad:=&soyad;
new 12: soyad:='Valcin'
old 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 12: soyad:=\soyad;
new 13: dogum_tarihi: '12/10/2002'
Enter value for tel: '05412897456'
old 14: tel:=\soyad:=\soyad;
new 14: del:=\soyad:=\soyad;
new 15: email:=\somail:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\somaili:\
```

```
create or replace procedure INSERT SINIF (
 sid IN NUMBER,
 sinif kod IN NUMBER,
 kat IN NUMBER)
begin
 insert into sinif values (sid, sinif_kod, kat);
 commit:
end;
SET SERVEROUTPUT ON
DECLARE
 sid NUMBER;
 sinif_kod NUMBER;
 kat NUMBER;
BEGIN
 sid:=&sid;
 sinif_kod:=&sinif_kod;
 kat:=&kat;
 INSERT SINIF(sid, sinif kod, kat);
 DBMS OUTPUT.PUT LINE('KAYIT BASARILIYLA
EKLENDİ.');
END;
/
```

```
SQL Plus
SQL> create or replace procedure INSERT_SINIF (
2 sid IN NUMBER,
3 sinif_kod IN NUMBER,
4 kat IN NUMBER)
      begin
            insert into sinif values (sid, sinif_kod, kat);
 10 /
Procedure created.
SQL> SET SERVEROUTPUT ON
SQL> DECLARE
            sid NUMBER;
            sinif_kod NUMBER;
           kat NUMBER;
      BEGIN
           GIN
sid:=&sid;
sid:=&sid;
sinif_kod:=&sinif_kod;
kat:=&kat;
INSERT_SINIF(sid, sinif_kod, kat);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
 10
      END:
        value for sid: 1
6: sid:=&sid;
old 6:
old 6: $1d:=4$1d;

new 6: $id:=1;

Enter value for $inif_kod: 102

old 7: $inif_kod:=&$inif_kod;

new 7: $inif_kod:=102;
Enter value for kat: 1
old 8: kat:=&kat;
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
Enter value for sid: 2
                sid:=&sid;
old
                sid:=2;
new
Enter value for sinif_kod: 202
                sinif_kod:=&sinif_kod;
old
                sinif_kod:=202;
new
Enter value for kat: 2
                kat:=&kat;
old
new
      8:
                kat:=2;
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
Enter value for sid: 3
                 sid:=&sid;
old
      6:
      6:
                 sid:=3;
new
Enter value for sinif_kod: 302
old
      7:
                 sinif kod:=&sinif kod;
      7:
new
                 sinif_kod:=302;
Enter value for kat: 3
old
      8:
                 kat:=&kat;
new
      8:
                 kat:=3;
KAYIT BASARILIYLA EKLENDİ.
```

```
Enter value for sid: 4
                 sid:=&sid;
old 6:
                 sid:=4;
      6:
new
Enter value for sinif_kod: 402
                 sinif_kod:=&sinif_kod;
sinif_kod:=402;
old
new
Enter value for kat: 4
old
      8:
                 kat:=&kat;
                 kat:=4;
     8:
new
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT ZAMAN (
 zid IN NUMBER,
 gun IN VARCHAR2,
 saat IN VARCHAR2)
begin
 insert into zaman values (zid, gun, saat);
 commit:
end;
SET SERVEROUTPUT ON
DECLARE
 zid NUMBER;
 gun VARCHAR2(20);
 saat VARCHAR2(20);
BEGIN
 zid:=&zid;
 gun:=&gun;
 saat:=&saat;
 INSERT_ZAMAN(zid, gun, saat);
 DBMS OUTPUT.PUT LINE('KAYIT BASARILIYLA
EKLENDİ.');
END;
/
```

```
Enter value for zid: 3
                zid:=&zid;
old 6:
     6:
                zid:=3;
Enter value for gun: 'sali'
old 7:
                gun:=&gun;
                gun:='sali';
new
Enter value for saat: '12:00'
old
     8:
                saat:=&saat;
                saat:='12:00';
      8:
new
KAYIT BASARILIYLA EKLENDİ.
```

```
Enter value for zid: 4

old 6: zid:=&zid;

new 6: zid:=4;

Enter value for gun: 'carsamba'

old 7: gun:=&gun;

new 7: gun:='carsamba';

Enter value for saat: '13:30'

old 8: saat:=&saat;

new 8: saat:='13:30';

KAYIT BASARILIYLA EKLENDÎ.
```

```
SQL Plus
SQL> SET SERVEROUTPUT ON
SQL> DECLARE
        zid NUMBER;
gun VARCHAR2(20);
          saat VARCHAR2(20);
    BEGIN
         zid:=&zid;
          saat:=&saat;
         INSERT_ZAMAN(zid, gun, saat);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
11 END;
12 /
old 6: zid:=&zid;
new 6: zid:=1;
new 6: zid:=1;
Enter value for gun: 'pazartesi'
old 7: gun:=&gun;
new 7: gun:='pazartesi';
Enter value for saat: '13:30'
old 7:
new 7:
old 8:
new 8:
                   saat:=&saat;
saat:='13:30';
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
Enter value for zid: 2
old
      6:
                 zid:=&zid;
new
      6:
                zid:=2;
Enter value for gun: 'sali'
      7:
old
                gun:=&gun;
                gun:='sali';
      7:
new
Enter value for saat: '10:00'
old
      8:
                saat:=&saat;
                saat:='10:00';
      8:
new
KAYIT BASARILIYLA EKLENDİ.
```

```
create or replace procedure INSERT DERS DURUM (
 durum id IN NUMBER,
 durum IN VARCHAR2)
is
 insert into ders_durum values (durum_id, durum);
 commit;
end;
/
SET SERVEROUTPUT ON
DECLARE
 durum id NUMBER;
 durum VARCHAR2(40);
BEGIN
 durum_id:=&durum_id;
 durum:=&durum;
 INSERT_DERS_DURUM(durum_id, durum);
 DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA
EKLENDİ.');
END;
/
```

```
Enter value for durum_id: 2
old 5: durum_id:=&durum_id;
new 5: durum_id:=2;
Enter value for durum: 'Universite Secmeli'
old 6: durum:=&durum;
new 6: durum:='Universite Secmeli';
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
SQL Plus

SQL> create or replace procedure INSERT_DERS_DURUM (
2 durum_id IN NUMBER,
3 durum IN VARCHAR2)
4 is
5 begin
6 insert into ders_durum values (durum_id, durum);
7 commit;
8 end;
9 /

Procedure created.
```

```
SQL > SET SERVEROUTPUT ON
SQL > DECLARE

2 durum_id NUMBER;

3 durum VARCHAR2(40);

4 BEGIN

5 durum_id:=&durum_id;

6 durum:=&durum;

7 INSERT_DERS_DURUM(durum_id, durum);

8 DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDĪ.');

9 END;

10 /
Enter value for durum_id: 1
old 5: durum_id:=&durum_id;
new 5: durum_id:=1;
Enter value for durum: 'Zorunlu Ders'
old 6: durum:='Zorunlu Ders';
KAYIT BASARILIYLA EKLENDĪ.

PL/SQL procedure successfully completed.
```

```
Enter value for durum_id: 3

old 5: durum_id:=&durum_id;

new 5: durum_id:=3;
Enter value for durum: 'Teknik Secmeli'

old 6: durum:=&durum;

new 6: durum:='Teknik Secmeli';

KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT UNVAN (
 unvan id IN NUMBER,
 unvan IN VARCHAR2)
is
 insert into unvan values (unvan_id, unvan);
 commit;
end:
/
SET SERVEROUTPUT ON
DECLARE
 unvan id NUMBER;
 unvan VARCHAR2(40);
BEGIN
 unvan_id:=&unvan_id;
 unvan:=&unvan;
 INSERT_UNVAN(unvan_id, unvan);
 DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA
EKLENDİ.');
END;
/
```

```
Enter value for unvan_id: 2
old 5: unvan_id:=&unvan_id;
new 5: unvan_id:=2;
Enter value for unvan: 'Docent'
old 6: unvan:=&unvan;
new 6: unvan:='Docent';
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
Enter value for unvan_id: 3
old 5: unvan_id:=&unvan_id;
new 5: unvan_id:=3;
Enter value for unvan: 'Doktor'
old 6: unvan:=&unvan;
new 6: unvan:='Doktor';
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
SQL Plus

SQL> create or replace procedure INSERT_UNVAN (

2 unvan_id IN NUMBER,

3 unvan IN VARCHAR2)

4 is

5 begin

6 insert into unvan values (unvan_id, unvan);

7 commit;

8 end;

9 /

Procedure created.
```

```
SQL Plus
SQL> SET SERVEROUTPUT ON
SQL> DECLARE
         unvan_id NUMBER;
        unvan VARCHAR2(40);
        unvan_id:=&unvan_id;
         unvan:=&unvan;
        INSERT_UNVAN(unvan_id, unvan);
DBMS_UUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
 10 /
Enter value for unvan id: 1
               unvan_id:=&unvan_id;
                 unvan_id:=1;
Enter value for unvan: 'Profesor'
old 6: unvan:=&unvan;
new 6: unvan:='Profes
                 unvan:='Profesor';
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
Enter value for unvan_id: 4
old 5: unvan_id:=&unvan_id;
new 5: unvan_id:=4;
Enter value for unvan: 'Ogretim Gorevlisi'
old 6: unvan:=&unvan;
new 6: unvan:='Ogretim Gorevlisi';
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT DERSLER (
                                                                                                                                                                                                                                                                                                           SQL Plus
                   did IN NUMBER,
                                                                                                                                                                                                                                                                                                                        create or replace procedure INSERT_DERSLER (
did IN NUMBER,
ders_kod IN CHAR,
                   ders kod IN CHAR,
                                                                                                                                                                                                                                                                                                                                   ders_kod IN CHAK,
ders_ad IN VARCHAR2,
ders_kredi IN NUMBER,
bid IN NUMBER,
sid IN NUMBER,
zid IN NUMBER,
durum_id IN NUMBER)
                   ders_ad IN VARCHAR2,
                   ders kredi IN NUMBER,
                   bid IN NUMBER,
                   sid IN NUMBER,
                   zid IN NUMBER,
                                                                                                                                                                                                                                                                                                                        insert into dersler values (did, ders_kod,
ders_ad, ders_kredi, bid, sid, zid, durum_id);
                   durum id IN NUMBER)
                                                                                                                                                                                                                                                                                                                                     commit:
         is
         begin
                                                                                                                                                                                                                                                                                                        Procedure created.
                   insert into dersler values (did, ders kod,
                                                                                                                                                                                                                                                                                                          SQL> SET SERVEROUTPUT ON
         ders ad, ders kredi, bid, sid, zid, durum id);
                                                                                                                                                                                                                                                                                                        SQL> DECLARE
2 did
                                                                                                                                                                                                                                                                                                                                    did NUMBER;
                   commit;
                                                                                                                                                                                                                                                                                                                                     ders_kod CHAR(6);
ders_ad VARCHAR2(40);
         end;
                                                                                                                                                                                                                                                                                                                                    ders_kredi NUMBER;
bid NUMBER;
sid NUMBER;
         SET SERVEROUTPUT ON
                                                                                                                                                                                                                                                                                                                                     zid NUMBER
                                                                                                                                                                                                                                                                                                                                      durum_id NUMBER;
                                                                                                                                                                                                                                                                                                                       BEGIN
did:=&did;
         DECLARE
                                                                                                                                                                                                                                                                                                                           data:=&dru;
ders_kod:=&ders_kod;
ders_ad:=&ders_ad;
ders_kredi:=&ders_kredi;
bid:=&bid;
                   did NUMBER;
                   ders_kod CHAR(6);
                   ders ad VARCHAR2(40);
                                                                                                                                                                                                                                                                                                                              sid:=&sid;
                                                                                                                                                                                                                                                                                                                        sid:=&zid;
durum_id:=&durum_id;
INSERT_DERSLER(did, ders_kod, ders_ad,
ders_kredi, bid, sid, zid, durum_id);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
                   ders kredi NUMBER;
                   bid NUMBER;
                   sid NUMBER;
                                                                                                                                                                                                                                                                                                          22
23
                                                                                                                                                                                                                                                                                                                         END:
                   zid NUMBER;
                                                                                                                                                                                                                                                                                                      Enter value for did: 1

old 11: did:=&did;

new 11: did:=1;

Enter value for ders_kod: 'IMU031'

old 12: ders_kod:=&ders_kod;

new 12: ders_kod:=*IMU031';

Enter value for ders_ad: 'Turk Edebiyati'

old 13: ders_ad:=&ders_ad;

new 13: ders_ad:=*Turk Edebiyati';

Enter value for ders_kredi: 2

old 14: ders_kredi:=&ders_kredi;

new 14: ders_kredi:=&ders_kredi;

new 16: ders_kredi:=2;

Enter value for bid: 4

old 15: bid:=&bid;

new 15: bid:=4;

Enter value for sid: 1

old 16: sid:=&sid;

new 16: sid:=3;

Enter value for zid: 3

old 17: zid:=&zid;

new 17: zid:=&z;

Enter value for durum_id: 2

old 18: durum_id:=&durum_id;

new 18: durum_id:=&LEENDI.
                   durum id NUMBER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enter value for did: 2
old 11: did:=&did;
new 11: did:=2;
Enter value for ders_kod: 'IMU096'
old 12: ders_kod:=&ders_kod;
new 12: ders_kod:=|MU096';
Enter value for ders_ad: 'Inkilap Tarihi'
old 13: ders_ad:=&ders_ad;
new 13: ders_ad:='Inkilap Tarihi';
Enter value for ders_keders_kedi: 2
old 14: ders_kredi:=&ders_kredi;
new 14: ders_kredi:=2;
Enter value for bid: 3
old 15: bid:=&bid;
new 16: bid:=3;
Enter value for sid: 2
         BEGIN
                   did:=&did;
                   ders_kod:=&ders_kod;
                   ders ad:=&ders ad;
                   ders_kredi:=&ders_kredi;
                   bid:=&bid;
                   sid:=&sid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      new 15: bid:=3;
Enter value for sid: 2
old 16: sid:=&sid;
new 16: sid:=2;
Enter value for zid: 3
old 17: zid:=&zid;
new 17: zid:=3;
Enter value for durum_id: 3
old 18: durum_id:=&durum_id;
new 18: durum_id:=3;
KAYIT BASARILIYLA EKLENDI.
                   zid:=&zid;
                   durum id:=&durum id;
                   INSERT_DERSLER(did, ders_kod, ders_ad,
          ders_kredi, bid, sid, zid, durum_id);
                   DBMS OUTPUT.PUT LINE(
          'KAYIT BASARILIYLA EKLENDİ.');
                                                                                                                                                                                                                                                                                                                                  Enter value for did: 5
old 11: did:=8did;
new 11: did:=5;
Enter value for ders_kod: 'EEM698'
old 12: ders_kod:='EEM698';
Enter value for ders_ad: 'Elektronik'
old 13: ders_ad:='Elektronik';
Enter value for ders_ad: 'Elektronik'
enter value for ders_kredi: 6
old 14: ders_kredi:=6;
Enter value for bid: 2
old 15: bid:=8id;
new 16: bid:=8id;
new 15: bid:=2;
Enter value for sid: 4
old 16: sid:=4;
Enter value for zid: 4
old 17: zid:=8zid;
new 16: sid:=4;
Enter value for durum_id: 2
old 18: durum_id:=8durum_id;
new 18: durum_id:=2;
KAYIT BASARILIYLA EKLENDI.
         END;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enter value for did: 6
old 11: did:=&did;
new 11: did:=&;
Enter value for ders kod: 'BIL549'
old 12: ders_kod:=&ders_kod;
new 12: ders_kod:='BIL549';
Enter value for ders_ad: 'Programlama'
old 13: ders_ad:=&ders_ad;
new 13: ders_ad:='Programlama';
Enter value for ders_kredi: 5
old 14: ders_kredi:=&ders_kredi:
old 14: ders_kredi:=&ders_kredi:
                                                                                                                                                                   Enter value for did: 4
old 11: did:=&did;
new 11: did:=&f;
Enter value for ders_kod: 'BIL456'
old 12: ders_kod:=&ders_kod;
new 12: ders_kod:=BlL456';
Enter value for ders_di:"BIL456';
Enter value for ders_di:"BIL456';
Enter value for ders_dieles_ad;
new 13: ders_di=&ders_di;
new 13: ders_di=&ders_di;
Enter value for ders_kredi: 7
old 14: ders_kredi:=7;
Enter value for bid: 1
old 15: bid:=&bid;
new 15: bid:=&f or bid: 4
old 16: sid:=&sid:=&f or bid: 4
old 16: sid:=&sid:=&f or bid: 4
old 17: zid:=&zid: 4
old 17: zid:=&zid: 4
old 17: zid:=&zid: 4
old 18: durum_id:=&durum_id: 3
old 18: durum_id:=&durum_id;
new 18: did=#
KAYIT BASARILIYLA EKLENDI.
er value for did: 3

11: did::&did;

11: did::&did;

11: did::&did;

12: ders.kod::&ders.kod;

12: ders.kod:=&ders.kod;

12: ders.kod:=&ders.kod;

13: ders.ad::&ders.ad;

13: ders.ad::&ders.ad;

13: ders.ad::&ders.ad;

14: ders.kredi::&ders.kredi;

16: ders.kredi::&ders.kredi;

17: did::&bid;

18: bid::&ders.kredi::&ders.kredi;

18: ders.kredi::&ders.kredi;

19: did::&ders.kredi::&ders.kredi;

10: sid::&ders.kredi::&ders.kredi;

11: ders.kredi::&ders.kredi;

12: did::&ders.kredi::&ders.kredi;

13: did::&ders.kredi::&ders.kredi;

14: did::&ders.kredi::&ders.kredi;

15: did::&ders.kredi::&ders.kredi;

16: sid::&ders.kredi::&ders.kredi;

17: zid::&ders.kredi::&ders.kredi;

18: durum.id::&durum.id::&ders.kredi;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id;

18: durum.id::&durum.id::&durum.id;

18: durum.id::&durum.id::&durum.id;

18: durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&durum.id::&dur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enter value for ders_kredi: 5
old 14: ders_kredi:=8ders_kredi;
new 14: ders_kredi:=5;
Enter value for bid: 1
old 15: bid:=8bid;
new 15: bid:=1;
Enter value for sid: 3
old 16: sid:=8sid;
new 16: sid:=8sid;
new 16: sid:=3;
Enter value for zid: 4
old 17: zid:=8zid;
new 17: zid:=4;
Enter value for durum_id: 3
old 18: durum_id:=8durum_id;
new 18: durum_id:=3;
KAYIT BASARILIYLA EKLEND1.
```

```
create or replace procedure INSERT OGRENCI DERS NOT (
   oid IN NUMBER,
   did IN NUMBER,
                                                                                                                       SQL Plus
   vize IN FLOAT,
                                                                                                                           create or replace procedure INSERT_OGRENCI_DERS_NOT (
oid IN NUMBER,
did IN NUMBER,
vize IN FLOAT,
final IN FLOAT,
   final IN FLOAT,
   ortalama IN FLOAT)
                                                                                                                               ortalama IN FLOAT)
is
                                                                                                                           is
begin
begin
                                                                                                                           insert into ogrenci_ders_not values (oid, did, vize
final, ortalama);
   commit;
                                                                                                                      10
11
   insert into ogrenci ders not values (oid, did, vize,
                                                                                                                           end;
final, ortalama);
   commit;
                                                                                                                       rocedure created.
end;
                                                                                                                      SQL> SET SERVEROUTPUT ON
SQL> DECLARE
/
                                                                                                                             oid NUMBER;
did NUMBER;
vize FLOAT;
                                                                                                                           final FLOAT;
ortalama FLOAT;
BEGIN
SET SERVEROUTPUT ON
                                                                                                                               GIN
oid:=&oid;
did:=&oid;
vize:=&vize;
final:=&final;
ortalama:=&ortalama;
INSERT_OGRENCI_DERS_NOT(oid, did, vize,
DECLARE
   oid NUMBER;
   did NUMBER;
                                                                                                                           final, ortalama);
DBMS_OUTPUT_PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
   vize FLOAT;
   final FLOAT;
   ortalama FLOAT;
BEGIN
   oid:=&oid;
   did:=&did;
   vize:=&vize;
   final:=&final;
   ortalama:=&ortalama;
   INSERT_OGRENCI_DERS_NOT(oid, did, vize,
final, ortalama);
    DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
END;
                                         value for oid: 1
8: oid:=&oid;
                                                                                                                      Enter value for oid: 2
                                                                                                                     lold 8: oid:=&oid;
new 8: oid:=2;
Enter value for did: 4
                                old 8:
new 8:
                                Enter value for did: 3
                                old 9:
new 9:
                                                                                                                     old 9: did:=&did;
new 9: did:=4;
                                new 9: did:=3;
Enter value for vize: 60.50
                                                                                                                     new 9: did:=4;
Enter value for vize: 90
old 10: vize:=&vize;
new 10: vize:=90;
Enter value for final: 70
old 11: final:=&final;
new 11: final:=70;
Enter value for ortalama: 80
old 12: ortalama:=&ortalama;
                                old 10:
new 10:
                                                 vize:=&vize;
vize:=60.50;
                                Enter value for final: 70 old 11: final:=&final;
                                new 11: final:=70;
Enter value for ortalama: 65.25
old 12: ortalama:=&ortalama;
                                new 12: ortalama:=65.25;
KAYIT BASARILIYLA EKLENDİ.
                                                                                                                     new 12: ortalama:=80;
KAYIT BASARILIYLA EKLENDİ
                                PL/SQL procedure successfully completed.
                                                                                                                      PL/SQL procedure successfully completed
                                                                                                                              8: oid:=&oid;
8: oid:=4;
                                                                                                                     new 8: oid:=&oid;
Enter value for did: 1
old 9: did:=&did;
new 9: did:-1
                                old 8: oid:=&oid;
new 8: oid:=3;
Enter value for did: 4
                                Enter value for did: 4
old 9: did:=&did;
new 9: did:=4;
Enter value for vize: 75
old 10: vize:=&vize;
new 10: vize:=75;
Enter value for final: 100
old 11: final:=&final;
new 11: final:=100;
Enter value for ortalama: 87.5
old 12: ortalama:=&ortalama
                                                                                                                      Enter value for vize: 50 old 10: vize:=&vize; new 10: vize:=50; Enter value for final: 80
                                                                                                                       old 11: final:=&final;
new 11: final:=80;
Enter value for ortalama: 65
                                                                                                                       old 12: ortalama:=&ortalama;
new 12: ortalama:=65;
                                old 12: ortalama:=&ortalama;
new 12: ortalama:=87.5;
                                                                                                                       KAYIT BASARILIYLA EKLENDÎ.
                                KAYIT BASARILIYLA EKLENDÎ
                                                                                                                       PL/SQL procedure successfully completed
                                PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT OGRETMENLER (
    ogrt id IN NUMBER,
                                                                                                               SQL Plus
    ad IN VARCHAR2,
                                                                                                                      create or replace procedure INSERT_OGRETMENLER (
    ogrt_id IN NUMBER,
    soyad IN VARCHAR2,
                                                                                                                           ad IN VARCHAR2,
soyad IN VARCHAR2,
dogum_tarihi IN VARCHAR2,
    dogum tarihi IN VARCHAR2,
    tel IN CHAR,
                                                                                                                            tel IN CHAR,
    email IN VARCHAR2,
                                                                                                                            email IN VARCHAR2,
                                                                                                                            bid IN NUMBER,
    bid IN NUMBER,
                                                                                                                            unvan_id IN NUMBER)
                                                                                                               10
    unvan id IN NUMBER)
                                                                                                                      begin
                                                                                                              11
12
13
14
15
                                                                                                                      insert into ogretmenler values (ogrt_id, ad, soyad,
to_date(dogum_tarihi, 'dd/mm/yyyy'), tel, email, bid, unvan_id);
is
begin
                                                                                                                            commit;
    insert into ogretmenler values (ogrt id,
ad, soyad,
                                                                                                               rocedure created.
to_date(dogum_tarihi, 'dd/mm/yyyy'),
tel, email, bid, unvan_id);
                                                                                                                SQL> SET SERVEROUTPUT ON
SQL> DECLARE
2 ogrt_id NUMBER;
3 ad VARCHAR2(20);
    commit;
                                                                                                                    ogt_Id NUBER;
ad VARCHAR2(20);
soyad VARCHAR2(20);
dogum_tarihi VARCHAR2(10);
tel CHAR(11);
email VARCHAR2(40);
bid NUBER;
unvan_id NUMBER;
BEGIN
ogrt_id:=&ogrt_id;
ad:=&ad;
soyad:=&soyad;
dogum_tarihi:=&dogum_tarihi;
tel:=&tel;
email:=&teal;
bid:=&bid;
unvan_id:=&unvan_id;
dogum_tarihi:=CHAR(TO_DATE(dogum_tarihi, 'dd/mm/yyyy'), 'dd/mm/yyyy');
INSERT_OGRETMENLER(ogrt_id, ad, soyad, dogum_tarihi, tel, email, bid, unvan_id);
DBMS_OUTPUT.PUT_LINE('KAYIT_BASARILIYLA_EKLENDI.');
END;
end:
SET SERVEROUTPUT ON
DECLARE
    ogrt id NUMBER;
    ad VARCHAR2(20);
    soyad VARCHAR2(20);
    dogum tarihi VARCHAR2(10);
                                                                                                                    tel CHAR(11);
    email VARCHAR2(40);
    bid NUMBER;
    unvan_id NUMBER;
BEGIN
    ogrt_id:=&ogrt_id;
    ad:=&ad;
                                                                                                                      15: tel:='05367854369';
r value for email: 'hasanyilmaz@gmail.com'
16: email:=&mail;
16: email:=kmain;
17: bid:=&bid;
17: bid:=&bid;
17: bid:=&bid;
17: bid:=&id:=&unvan_id;
18: unvan_id:=&unvan_id;
18: unvan_id:=1;
18: unvan_id:-1;
    soyad:=&soyad;
    dogum tarihi:=&dogum tarihi;
    tel:=&tel:
    email:=&email;
    bid:=&bid;
    unvan id:=&unvan id;
    dogum tarihi:=TO CHAR(TO DATE(dogum tarihi, 'dd/mm/yyyy'), 'dd/mm/yyyy');
    INSERT_OGRETMENLER(ogrt_id, ad, soyad, dogum_tarihi, tel, email, bid, unvan_id);
     DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
                                                                                                 old 11: ogrt_id:=&ogrt_id;
old 11: ogrt_id:=&ogrt_id;
new 11: ogrt_id:=2;
Enter value for ad: 'Yusuf'
old 12: ad:=&ad;
new 12: ad:='Yusuf';
Enter value for soyad: 'Yasar'
old 13: soyad:=&soyad;
new 13: soyad:='Yasar';
Enter value for fogwum tarihi:
Fater value for fogwum tarihi:
                                                                                                                                                                                Enter value for ogrt_id: 4
old 11: ogrt_id:=&ogrt_id;
new 11: ogrt_id:=&ogrt_id;
enter value for ad: 'Omer'
old 12: ad:=&ad;
enew 12: ad:='Omer';
enter value for soyad: 'Yildiz'
old 13: soyad:=&soyad;
Jnew 13: soyad:='Yildiz';
enter value for fogum_tarihi: '01/05/1970'
old 14: dogum_tarihi:='01/05/1970'
old 14: dogum_tarihi:='01/05/1970';
enter value for tel: '05478458736'
enter value for email: 'omeryildiz@gmail.com'
old 16: email:=&email;
new 16: email:='comeryildiz@gmail.com';
Enter value for bid: 4
old 17: bid:=&bid;
new 17: bid:=&bid;
new 17: bid:=4;
enter value for unvan_id: 3
old 18: unvan_id:=&unvan_id: 3
END;
                   new 13: soyad: "Yasar';
Enter value for dogum_tarihi: '10/02/1975'
old 14: dogum_tarihi: "8dogum_tarihi;
new 14: dogum_tarihi: "10/02/1975';
Enter value for tel: '05412354852'
old 15: tel:=8tel;
new 15: tel:='05412354852';
Enter value for email: 'yusufyasar@gmail.com'
old 16: email:=&mail;
new 16: email:='yusufyasar@gmail.com';
Enter value for bid: 1
old 17: bid:=&bid;
new 17: bid:=!;
Enter value for unvan_id: 2
                     old 18: unvan_id:=&unvan_id;
new 18: unvan_id:=2;
KAYIT BASARILIYLA EKLENDİ.
                                                                                                                                                                                  enter value for unvan_id:=&unvan_id;
new 18: unvan_id:=3;
KAYIT BASARILIYLA EKLENDĪ.
```

```
SQL Plus
create or replace procedure INSERT OGRETMEN DERS (
  ogrt id IN NUMBER,
                                                                                            SQL> create or replace procedure INSERT_OGRETMEN_DERS (
2 ogrt_id IN NUMBER,
3 did IN NUMBER)
  did IN NUMBER)
is
                                                                                                begin
                                                                                                   insert into ogretmen_ders values(ogrt_id, did);
  insert into ogretmen_ders values(ogrt_id, did);
  commit;
                                                                                            Procedure created.
end;
                                                                                            SQL> SET SERVEROUTPUT ON
                                                                                            SQL> DECLARE
2 ogrt_id NUMBER;
3 did NUMBER;
/
                                                                                                BEGIN

ogrt_id:=&ogrt_id;

did:=&did;
SET SERVEROUTPUT ON
                                                                                                   INSERT_OGRETMEN_DERS(ogrt_id, did);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
DECLARE
                                                                                                END;
                                                                                          9 END;
10 /
Enter value for ogrt_id: 1
old 5: ogrt_id:=&ogrt_id;
new 5: ogrt_id:=1;
Enter value for did: 5
old 6: did:=&did;
new 6: did:=5;
new 6: ATTIVIA EKLENDÎ.
  ogrt_id NUMBER;
  did NUMBER;
BEGIN
  ogrt_id:=&ogrt_id;
  did:=&did;
                                                                                           PL/SQL procedure successfully completed.
  INSERT_OGRETMEN_DERS(ogrt_id, did);
  DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
END;
/
```

```
Enter value for ogrt_id: 2
old 5: ogrt_id:=&ogrt_id;
new 5: ogrt_id:=2;
Enter value for did: 4
old 6: did:=&did;
new 6: did:=4;
KAYIT BASARILIYLA EKLENDÎ.

PL/SQL procedure successfully completed.
```

```
Enter value for ogrt_id: 4
old 5: ogrt_id:=&ogrt_id;
new 5: ogrt_id:=4;
Enter value for did: 1
old 6: did:=&did;
new 6: did:=1;
KAYIT BASARILIYLA EKLENDÎ.

PL/SQL procedure successfully completed.
```

```
BEnter value for ogrt_id: 3
lold 5: ogrt_id:=&ogrt_id;
new 5: ogrt_id:=3;
Enter value for did: 6
old 6: did:=&did;
new 6: did:=6;
KAYIT BASARILIYLA EKLENDÎ.

PL/SQL procedure successfully completed.
```

```
create or replace procedure INSERT KULUPLER (
                                                                   SQL Plus
  kid IN NUMBER,
                                                                      create or replace procedure INSERT_KULUPLER (
   kid IN NUMBER,
  kulup_adi IN VARCHAR2,
                                                                        kulup_adi IN VARCHAR2,
zid IN NUMBER)
  zid IN NUMBER)
                                                                     is
begin
begin
  insert into kulupler values (kid, kulup_adi, zid);
end;
                                                                   SOL> DECLARE
                                                                         kid NUMBER;
                                                                         kulup_adi VARCHAR2(40);
zid NUMBER;
SET SERVEROUTPUT ON
                                                                      BEGIN
                                                                         oin
kid:=&kid;
kulup_adi:=&kulup_adi;
zid:=&zid;
INSERT_KULUPLER(kid, kulup_adi, zid);
DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
DECLARE
  kid NUMBER;
  kulup_adi VARCHAR2(40);
  zid NUMBER;
BEGIN
  kid:=&kid:
  kulup_adi:=&kulup_adi;
  zid:=&zid;
  INSERT KULUPLER(kid, kulup adi, zid);
  DBMS_OUTPUT.PUT_LINE('KAYIT BASARILIYLA EKLENDİ.');
END;
 /
                                                         Enter value for kid: 2
Enter value for kid: 1
old 6:
new 6:
                                                         old
                  kid:=&kid;
                                                                            kid:=2;
                                                         new
                                                               6:
Enter value for kulup_adi: 'IEEE'
                  kulup_adi:=&kulup_adi;
                                                         old 7:
                 kulup_adi:='IEEE';
                                                         new
                                                         Enter value for zid: 3
Enter value for zid: 1
old 8:
                 zid:=&zid;
                                                         old
new 8:
                                                                            zid:=3;
                                                         new 8:
KAYIT BASARILIYLA EKLENDİ.
```

```
Enter value for kid: 3
               kid:=&kid;
old 6:
new 6:
Enter value for kulup_adi: 'Yazarlik'
               kulup_adi:=&kulup_adi;
old 7:
               kulup_adi:='Yazarlik';
new
Enter value for zid: 2
               zid:=&zid;
old 8:
new 8:
               zid:=2:
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed
```

PL/SQL procedure successfully completed

```
kid:=&kid;
Enter value for kulup_adi: 'MedeniyeTekno'
                kulup_adi:=&kulup_adi;
                kulup adi:='MedeniyeTekno';
                zid:=&zid;
KAYIT BASARILIYLA EKLENDİ.
PL/SQL procedure successfully completed.
```

```
Enter value for kid: 4
old
      6:
                 kid:=&kid;
new
      6:
                 kid:=4;
Enter value for kulup_adi: 'Okculuk'
old
      7:
                 kulup_adi:=&kulup_adi;
                 kulup_adi:='Okculuk';
new
      7:
Enter value for zid: 4
old
      8:
                 zid:=&zid;
      8:
                 zid:=4;
KAYIT BASARILIYLA EKLENDİ.
```

```
create or replace procedure INSERT KULUP OGRENCI (
 oid IN NUMBER,
 kid IN NUMBER)
is
 insert into kulup_ogrenci values (oid, kid);
 commit;
                                                    end;
end;
/
SET SERVEROUTPUT ON
DECLARE
 oid NUMBER;
 kid NUMBER;
BEGIN
                                                 o1d
 oid:=&oid;
 kid:=&kid;
 INSERT_KULUP_OGRENCI(oid, kid);
 DBMS_OUTPUT_LINE('KAYIT BASARILIYLA
EKLENDİ.');
END;
```

```
Enter value for oid: 2
old 5: oid:=&oid;
new 5: oid:=2;
Enter value for kid: 4
old 6: kid:=&kid;
new 6: kid:=4;
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

/

```
Enter value for oid: 3
old 5: oid:=&oid;
new 5: oid:=3;
Enter value for kid: 4
old 6: kid:=&kid;
new 6: kid:=4;
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

```
Enter value for oid: 4
old 5: oid:=&oid;
new 5: oid:=4;
Enter value for kid: 3
old 6: kid:=&kid;
new 6: kid:=3;
KAYIT BASARILIYLA EKLENDİ.

PL/SQL procedure successfully completed.
```

4.procedure ile veri güncellemesi yapılması

create or replace procedure UPDATE_ZAMAN (

```
saat IN VARCHAR2,
  dersad IN VARCHAR2)
                                                                           eate or replace procedure UPDATE_ZAMAN (
saat_ IN VARCHAR2,
dersad IN VARCHAR2)
is
                                                                         begin
begin
                                                                                 zaman set saat = saat where zid in (select zid from dersler where ders ad
  update zaman set saat = saat_ where
zid in (select zid from dersler where
ders ad = dersad);
                                                                      QL> SET SERVEROUTPUT ON
  commit;
                                                                           saat VARCHAR2(20);
ders_ad VARCHAR2(40);
end;
                                                                           snat:=&saat;
ders_ad:=&ders_ad;
UPDATE_ZAMAN(saat, ders_ad);
DBMS_OUTPUT.PUT_LINE('GUNCELLEME YAPILDI.');
                                                                        r / r value for saat: '13:00'
5: saat:=&saat;
5: saat:='13:00';
rr value for ders_ad: 'Makine Ogrenmesi'
6: ders_ad:=&ders_ad;
6: ders_ad:='Makine Ogrenmesi';
ELLEME YAPILDI.
SET SERVEROUTPUT ON
DECLARE
  saat VARCHAR2(20);
  ders ad VARCHAR2(40);
BEGIN
  saat:=&saat;
  ders_ad:=&ders_ad;
  UPDATE_ZAMAN(saat, ders_ad);
  DBMS OUTPUT.PUT LINE('GUNCELLEME YAPILDI.');
 END;
create or replace procedure UPDATE OGRETMEN UNVAN (
```

```
unvanid IN NUMBER,
  unvan_ IN VARCHAR2)
                                                           reate or replace procedure UPDATE_OGRETMEN_UNVAN (
unvanid IN NUMBER,
unvan_ IN VARCHAR2)
begin
  update ogretmenler set unvan_id =
                                                          begin
                                                          usgan:
update ogretmenler set unvan_id = unvanid where unvan_id in (select unvan_id from unvan where
= unvan_);
unvanid where unvan_id in (select
unvan_id from unvan where unvan =
unvan );
  commit;
                                                       OL> SET SERVEROUTPUT ON
end;
                                                             unvan_id NUMBER;
unvan VARCHAR2(40);
/
                                                            unvan:=&unvan;
UPDATE_OGRETMEN_UNVAN(unvan_id, unvan);
DBMS_OUTPUT.PUT_LINE('GUNCELLEME YAPILDI.');
SET SERVEROUTPUT ON
DECLARE
  unvan_id NUMBER;
  unvan VARCHAR2(40);
                                                       new 6: unvan:='Doktor';
GUNCELLEME YAPILDI.
BEGIN
  unvan_id:=&unvan_id;
  unvan:=&unvan;
  UPDATE_OGRETMEN_UNVAN(unvan_id, unvan);
  DBMS_OUTPUT_LINE('GUNCELLEME YAPILDI.');
END;
```

5.procedure ile veri silme yapılması

```
create or replace procedure DELETE_OGRENCI (
 id IN NUMBER)
is
begin
 delete from ogrenci_ders_not where oid = id;
 delete from kulup_ogrenci where oid = id;
 delete from ogrenciler where oid = id;
 commit;
end;
SET SERVEROUTPUT ON
DECLARE
 oid NUMBER;
BEGIN
 oid:=&oid;
 DELETE_OGRENCI(oid);
 DBMS_OUTPUT.PUT_LINE('VERI SILINDI.');
END;
/
```

```
create or replace procedure DELETE OGRETMEN (
 id IN NUMBER)
is
begin
 delete from ogretmen_ders where ogrt_id = id;
 delete from ogretmenler where ogrt_id = id;
 commit;
end;
SET SERVEROUTPUT ON
DECLARE
  ogrt_id NUMBER;
BEGIN
  ogrt_id:=&ogrt_id;
  DELETE_OGRETMEN(ogrt_id);
  DBMS_OUTPUT.PUT_LINE('VERI SILINDI.');
END;
```

```
SQL> create or replace procedure DELETE_OGRETMEN (

2     id IN NUMBER)

3     is

4     begin

5     delete from ogretmen_ders where ogrt_id = id;

6     delete from ogretmenler where ogrt_id = id;

7     commit;

8     end;

9     /

Procedure created.

SQL>
SQL>
SQL>
SQL> SET SERVEROUTPUT ON
SQL> DECLARE

2     ogrt_id NUMBER;

3     BEGIN

4     ogrt_id:=&ogrt_id;

5     DELETE_OGRETMEN(ogrt_id);

6     DBMS_OUTPUT.PUT_LINE('VERI SILINDI.');

7     END;

8     /
Enter value for ogrt_id: 1
old 4: ogrt_id:=&ogrt_id;
new 4: ogrt_id:=&ogrt_id;
veri SILINDI.

PL/SQL procedure successfully completed.
```

6.trigger ile veri girişi yaplması

```
create or replace trigger ogrenciler_trigger_insert
after insert on ogrenciler
for each row
begin
  insert into ogrenci_ders_not (oid) values (:new.oid);
end;
/
```

```
new 12: soyad:='Yilmaz';
Enter value for dogum_tarihi: '01/01/2002'
old 13: dogum_tarihi:=&dogum_tarihi;
new 13: dogum_tarihi:=01/01/2002';
Enter value for tel: '05369874520'
old 14: tel:=&tel;
new 14: tel:='05369874520';
Enter value for email: 'ayseyilmaz@gmail.com'
old 15: email:=&email;
new 15: email:='ayseyilmaz@gmail.com';
Enter value for bid: 2
old 16: bid:=&bid;
new 16: bid:=2;
KAYIT BASARILIYLA EKLENDÎ.
  QL> create or replace trigger ogrenciler_trigger_insert
2 after insert on ogrenciler
3 for each row
    rigger created.
PL/SOL procedure successfully completed.
                                                                                                                                                                                                                                SQL> select * from ogrenciler;
                                                                                                                                                                                                                                               OID AD
                                                                                                                                                                                                                               EMAIL
                                                                                                                                                                                                                                 2 Ahmet
ahmetkaya@gmail.com
                                                                                                                                                                                                                               3 Betul
betulyalcin@gmail.com
                                                                                                                                                                                                                               4 Hasan
hasansahin@gmail.com
 20 END;
21 /
Enter value for oid: 1
old 10: oid:=Roid;
hew 10: oid:=1;
Enter value for ad: 'Ayse'
old 11: ad:=Roid;
hew 11: ad:=Roid;
hew 11: ad:=Roid;
hew 12: soyad:=Roid;
hew 12: soyad:=Roid;
hew 12: soyad:=Roid;
hew 12: soyad:=Yilmaz';
hew 13: dogum_tarihi: '01/01/2002';
hid 13: dogum_tarihi:=Roid;
hew 13: dogum_tarihi:=Roid;
hew 14: tel:=Roid;
hew 14: tel:=Roid;
hew 14: tel:=Roid;
hew 14: tel:=Roid;
hew 15: email:=Remail;
her value for email: 'ayseyilmaz@gmail.com'
old 15: email:=Remail;
                                                                                                                                                                                                                               EMAIL
                                                                                                                                                                                                                                1 Ayse
ayseyilmaz@gmail.com
                                                                                                                                                                                                                                SQL> select * from ogrenci_ders_not;
                                                                                                                                                                                                                                                                                                                                FINAL ORTALAMA
                                                                                                                                                                                                                                                                                                                                                                87.5
65
```

DOGUM TAR TEL

DOGUM_TAR TEL

10-FEB-01 05478469852 12-OCT-02 05412897456

```
create or replace trigger
ogretmenler_trigger_insert
after insert on ogretmenler
for each row
begin
   insert into ogretmen_ders (ogrt_id) values
(:new.ogrt_id);
end;
/
```

```
SQL> create or replace trigger ogretmenler_trigger_insert
2 after insert on ogretmenler
3 for each row
4 begin
5 insert into ogretmen_ders (ogrt_id) values (:new.ogrt_id);
6 end;
7 /
Trigger created.
```

7. select sorguları

```
SET SERVEROUTPUT ON
DECLARE
  i NUMBER;
  j NUMBER;
  d_bolum_ad bolumler.bolum_ad%TYPE;
  d_bid bolumler.bid%TYPE;
  d bolum blok bolumler.bolum blok%TYPE;
  d_bolum_mail bolumler.bolum_mail%TYPE;
BEGIN
  d_bolum_ad:=&bolum_ad;
  d bid:=&bid;
  FOR i IN (
         SELECT bolum blok, bolum mail FROM bolumler WHERE (d bolum ad IS NULL OR bolum ad =
         d_bolum_ad))
  LOOP
         d_bolum_blok := i.bolum_blok;
         d_bolum_mail := i.bolum_mail;
         DBMS_OUTPUT.PUT_LINE('Bolum Ad: ' || d_bolum_ad || ', Bolum Blok: ' || d_bolum_blok || ',
         Bolum Mail: ' | | d_bolum_mail);
  END LOOP;
  FOR j IN (
         SELECT bolum blok, bolum mail FROM bolumler WHERE (d bid IS NULL OR bid = d bid))
  LOOP
         d bolum blok := j.bolum blok;
         d bolum mail:= j.bolum mail;
         DBMS_OUTPUT.PUT_LINE('Bolum Id: ' || d_bid || ', Bolum Blok: ' || d_bolum_blok || ', Bolum
         Mail: ' || d_bolum_mail);
  END LOOP;
END;
SQL> SET SERVEROUTPUT ON
SQL> DECLARE
2 i NUMBER;
3 j NUMBER;
4 d_bolum_ad bolumler.bolum_ad%TYPE;
5 d_boid bolumler.bid%TYPE;
6 d_bolum_blok bolumler.bolum_blok%TYPE;
7 d_bolum_mail bolumler.bolum_mail%TYPE;
8 REGIU
    BEGIN
   BEGIN
d_bolum_ad:=&bolum_ad;
d_bid:=&bid;
FOR i IN (
SELECT bolum_blok, bolum_mail FROM bolumler WHERE (d_bolum_ad IS NULL OR bolum_ad = d_bolum_ad))
    LOOP
d_bolum_blok := i.bolum_blok;
    d_bolum_mail := i.bolum_mail;

DBMS_OUTPUT_PUT_LINE('Bolum Ad: ' || d_bolum_ad || ', Bolum Blok: ' || d_bolum_blok || ', Bolum Mail: ' || d_bolum_mail);
    FOR j IN (
SELECT bolum_blok, bolum_mail FROM bolumler WHERE (d_bid IS NULL OR bid = d_bid))
    of
25 END;
26 /
enter value for bolum ad: 'Makine Muhendisligi'
d bolum ad:=&bolum_ad;
Enter value for bolum_ad: "Makine Muhendisligi'
old 9: d_bolum_ad:=&bolum_ad;
new 9: d_bolum_ad:= Makine Muhendisligi';
Enter value for bid: 3
old 10: d_bid:=&bid;
new 10: d_bid:=3;
Bolum Ad: Makine Muhendisligi, Bolum Blok: A , Bolum Mail: mak@imu.edu.tr
Bolum Id: 3, Bolum Blok: A , Bolum Mail: mak@imu.edu.tr
 L/SQL procedure successfully completed.
```

```
SET SERVEROUTPUT ON
DECLARE
 i NUMBER;
 d_did dersler.did%TYPE;
 d_ders_ad dersler.ders_ad%TYPE;
 d_ders_kod dersler.ders_kod%TYPE;
BEGIN
 d_ders_ad:=&ders_ad;
 FOR i IN (
     SELECT did, ders_ad, ders_kod FROM dersler WHERE (d_ders_ad IS NULL OR ders_ad =
 LOOP
     d_did := i.did;
     d_ders_kod := i.ders_kod;
     DBMS_OUTPUT.PUT_LINE('Ders Id: ' || d_did || ', Ders Ad: ' || d_ders_ad || ', Ders Kod: ' ||
     d_ders_kod);
 END LOOP;
 END;
```

```
SQL Plus
                                                                                                   SQL> SET SERVEROUTPUT ON
SQL> DECLARE
        i NUMBER;
        d_did dersler.did%TYPE;
        d_ders_ad dersler.ders_ad%TYPE;
        d_ders_kod dersler.ders_kod%TYPE;
    BEGIN
        d_ders_ad:=&ders_ad;
     SELECT did, ders_ad, ders_kod FROM dersler WHERE (d_ders_ad IS NULL OR ders_ad = d_ders_ad))
       LOOP
    d_did := i.did;
    d_ders_kod := i.ders_kod;
 13 DBMS_OUTPUT_PUT_LINE('Ders Id: ' || d_did || ', Ders Ad: ' || d_ders_ad || ', Ders Kod: ' || d_ders
kod);
        END LOOP:
 14
        END;
Enter value for ders_ad: 'Turk Edebiyati'
old 7: d_ders_ad:=&ders_ad;
new 7: d_ders_ad:='Turk Edebiyati';
Ders Id: 1, Ders Ad: Turk Edebiyati, Ders Kod: IMU031
PL/SQL procedure successfully completed.
```

8. Bilgisayar mühendisliği dersi tekrar etmiştir. DELETE_DUPLICATE prosedürü ile tekrar eden kayıt silinmiştir.

```
create or replace procedure DELETE_DUPLICATE (
 d tablo adi IN VARCHAR2,
 d_sutun_adi IN VARCHAR2)
as
begin
 EXECUTE IMMEDIATE 'DELETE FROM '|| d tablo adi || '
WHERE bid NOT IN (SELECT MIN(bid) FROM ' | | d tablo adi | | '
GROUP BY ' || d_sutun_adi || ')';
 DBMS_OUTPUT.PUT_LINE('Tekrar eden kayıtlar silindi.');
end;
SET SERVEROUTPUT ON
DECLARE
  tablo_adi VARCHAR2(20);
  sutun_adi VARCHAR2(20);
BEGIN
  tablo_adi:=&tablo_adi;
  sutun_adi:=&sutun_adi;
  DELETE DUPLICATE(tablo adi, sutun adi);
```

```
SQL > select * from bolumler;

BID BOLUM_AD

BOLUM_MAIL

1 Bilgisayar Muhendisligi
A bil@imu.edu.tr

2 Makine Muhendisligi
A mak@imu.edu.tr

3 Matematik Muhendisligi
A mat@imu.edu.tr

BID BOLUM_AD

BOLUM_MAIL

4 Tip

trp@imu.edu.tr

5 Bilgisayar Muhendisligi
A bil@imu.edu.tr
```

```
SQL Plus
SQL> SET SERVEROUTPUT ON
          tablo_adi VARCHAR2(20);
          sutun_adi VARCHAR2(20);
     BEGIN
          tablo_adi:=&tablo_adi;
         sutun_adi:=&sutun_adi;
DELETE_DUPLICATE(tablo_adi, sutun_adi);
10
 nter value for tablo_adi: 'bolumler'
enter Value for tablo_adi: botlmler
old 6: tablo_adi:=ktablo_adi;
new 6: tablo_adi:='bolumler';
Enter value for sutun_adi: 'bolum_ad'
old 7: sutun_adi:='bolum_ad';
new 7: sutun_adi:='bolum_ad';
Tekrar eden kayıtlar silindi.
PL/SQL procedure successfully completed.
SQL> select * from bolumler;
        BID BOLUM AD
                                                                        BO
BOLUM MAIL
            1 Bilgisayar Muhendisligi
oil@imu.edu.tr
            2 Makine Muhendisligi
 ak@imu.edu.tr
            3 Matematik Muhendisligi
 at@imu.edu.tr
         BID BOLUM_AD
BOLUM_MAIL
ip@imu.edu.tr
SQL> drop procedure DELETE_DUPLICATE;
 rocedure dropped.
```

Okçuluk kulübü tekrar etmiştir. Bu tekrar eden kayıt silinmiştir.

tablo_adi:=&tablo_adi;
tablo_adi:='kulupler';

sutun_adi:=&sutun_adi; sutun_adi:='kulup_adi';

Enter value for sutun_adi: 'kulup_adi'

PL/SQL procedure successfully completed.

Tekrar eden kayıtlar silindi.

SQL> select * from kulupler; KID KULUP_ADI

> 1 IEEE 2 MedeniyeTekno 3 Yazarlik 4 Okculuk

```
create or replace procedure DELETE_DUPLICATE2 (
  d tablo adi IN VARCHAR2,
  d_sutun_adi IN VARCHAR2)
as
begin
  EXECUTE IMMEDIATE 'DELETE FROM '|| d_tablo_adi || ' WHERE kid NOT IN (SELECT MIN(kid)
FROM ' || d_tablo_adi || ' GROUP BY ' || d_sutun_adi || ')';
  DBMS OUTPUT.PUT LINE('Tekrar eden kayıtlar silindi.');
end;
/
                                                          SQL> select * from kulupler;
SET SERVEROUTPUT ON
                                                                 KID KULUP ADI
                                                                                                                     ZID
DECLARE
                                                                   1 TEEF
  tablo_adi VARCHAR2(20);
                                                                   2 MedeniyeTekno
                                                                   3 Yazarlik
  sutun_adi VARCHAR2(20);
                                                                   4 Okculuk
                                                                   5 Okculuk
  tablo_adi:=&tablo_adi;
   sutun_adi:=&sutun_adi;
   DELETE DUPLICATE2(tablo adi, sutun adi);
END;
      create or replace procedure DELETE_DUPLICATE2 (
        d_tablo_adi IN VARCHAR2,
d_sutun_adi IN VARCHAR2)
     begin
 6 EXECUTE IMMEDIATE 'DELETE FROM '|| d_tablo_adi || ' WHERE kid NOT IN (SELECT MIN(kid) FROM ' ||
d_tablo_adi || ' GROUP BY ' || d_sutun_adi || ')';
7 DBMS_OUTPUT.PUT_LINE('Tekrar eden kayıtlar silindi.');
 Procedure created.
  SQL Plus
  SQL> SET SERVEROUTPUT ON
  SQL> DECLARE
           tablo_adi VARCHAR2(20);
           sutun_adi VARCHAR2(20);
      BEGIN
           tablo_adi:=&tablo_adi;
           sutun_adi:=&sutun_adi;
          DELETE_DUPLICATE2(tablo_adi, sutun_adi);
      END;
  Enter value for tablo_adi: 'kulupler'
```

ZID