

1) Create the table "member"

```
SQL> CREATE TABLE member(
member_id NUMBER(10)
    CONSTRAINT member_id_nn NOT NULL
    CONSTRAINT member_id_pk PRIMARY KEY,
last_name VARCHAR2(25),
first_name VARCHAR2(25),
address VARCHAR2(100),
city VARCHAR2(30),
phone VARCHAR2(15),
join_date DATE
);
```

2) Describe the member table

```
SQL> DESCRIBE member;
```

Name	Null?	Type
MEMBER_ID	NOT NULL	NUMBER(10)
LAST_NAME		VARCHAR2(25)
FIRST_NAME		VARCHAR2(25)
ADDRESS		VARCHAR2(100)
CITY		VARCHAR2(30)
PHONE		VARCHAR2(15)
JOIN_DATE		DATE

3) Verify the constraints

```
SQL> SELECT constraint_name, constraint_type, table_name FROM
user_constraints WHERE table_name = UPPER('member');
```

CONSTRAINT_NAME	C	TABLE_NAME
MEMBER_ID_NN	C	MEMBER
MEMBER_ID_PK	P	MEMBER

4) create the member_id_seq

```
SQL> CREATE SEQUENCE member_id_seq
INCREMENT BY 1
START WITH 101;
```

```
5) SELECT sequence_name, min_value, max_value, increment_by, last_number
FROM user_sequences
```

WHERE sequence_name = UPPER('member_id_seq');

SEQUENCE_NAME	MIN_VALUE	MAX_VALUE	INCREMENT_BY	LAST_NUMBER
MEMBER_ID_SEQ	1	1.0000E+27	1	101

6) Add data to member table

SQL> INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Velasquez'), UPPER('Carmen'),
UPPER('283 King Street'), UPPER('Seattle'), '206-899-6666', '08-MAR-1990');

INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Ngao'), UPPER('LaDoris'),
UPPER('5 Modrany'), UPPER('Bratislava'), '586-355-8882', '08-MAR-1990');

INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Nagayama'), UPPER('Midori'),
UPPER('68 Via Centrale'), UPPER('Sao Paolo'), '254-852-5764', '17-JUN-1991');

INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Quick-to-see'), UPPER('Mark'),
UPPER('6921 King Way'), UPPER('Lagos'), '63-559-7777', '07-APR-1990');

INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Ropeburn'), UPPER('Audry'),
UPPER('86 Chu Street'), UPPER('Hong Kong'), '41-559-87', '18-JAN-1991');

INSERT INTO member

VALUES (member_id_seq.NEXTVAL, UPPER('Urguhart'), UPPER('Molly'),
UPPER('3035 Laurier'), UPPER('Quebec'), '418-542-9988', '18-JAN-1991');

7) SQL> SELECT first_name, last_name, join_date FROM member;

FIRST_NAME	LAST_NAME	JOIN_DATE
CARMEN	VELASQUEZ	08-MAR-90
LADORIS	NGAO	08-MAR-90
MIDORI	NAGAYAMA	17-JUN-91
MARK	QUICK-TO-SEE	07-APR-90
AUDRY	ROPEBURN	18-JAN-91
MOLLY	URGUHART	18-JAN-91

8) SQL> ALTER TABLE member

ADD (zip VARCHAR2(10) DEFAULT 85233);

SQL> DESCRIBE member;

Name	Null?	Type
MEMBER_ID	NOT NULL	NUMBER(10)
LAST_NAME		VARCHAR2(25)
FIRST_NAME		VARCHAR2(25)
ADDRESS		VARCHAR2(100)
CITY		VARCHAR2(30)
PHONE		VARCHAR2(15)

JOIN_DATE		DATE
ZIP		VARCHAR2(10)

SQL> SELECT * FROM member;

MEMBER_ID	LAST_NAME	FIRST_NAME	ADDRESS	CITY	PHONE	JOIN_DATE	ZIP
101	VELASQUEZ	CARMEN	283 KING STREET	SEATTLE	206-899-6666	08-MAR-90	85233
102	NGAO	LADORIS	5 MODRANY	BRATISLAVA	586-355-8882	08-MAR-90	85233
103	NAGAYAMA	MIDORI	68 VIA CENTRAL E	SAO PAULO	254-852-5764	17-JUN-91	85233
104	QUICK-TO-SEE	MARK	6921 KING WAY	LAGOS	63-559-7777	07-APR-90	85233
105	ROPEBURN	AUDRY	86 CHU STREET	HONG KONG	41-559-87	18-JAN-91	85233
106	URGUHART	MOLLY	3035 LAURIER	QUEBEC	418-542-9988	18-JAN-91	85233

9) SQL> DESCRIBE member;

Name	Null?	Type
MEMBER_ID	NOT NULL	NUMBER(10)
LAST_NAME		VARCHAR2(25)
FIRST_NAME		VARCHAR2(25)
ADDRESS		VARCHAR2(100)
CITY		VARCHAR2(30)
PHONE		VARCHAR2(15)
JOIN_DATE		DATE
ZIP		VARCHAR2(10)

10) Add NOT NULL Constraint to zip

SQL> ALTER TABLE member
MODIFY zip NOT NULL;

SQL> SELECT constraint_name, constraint_type, table_name FROM
user_constraints WHERE table_name = UPPER('member');

CONSTRAINT_NAME	C	TABLE_NAME
MEMBER_ID_NN	C	MEMBER
MEMBER_ID_PK	P	MEMBER
SYS_C009884	C	MEMBER

11) Change zip for Midori & Molly to 85225
SQL> UPDATE member
SET ZIP = '85225'
WHERE first_name IN ('MIDORI','MOLLY');
SQL> SELECT * FROM member;

MEMBER_ID	LAST_NAME	FIRST_NAME	ADDRESS	CITY	PHONE	JOIN_DATE	ZIP
101	VELASQUEZ	CARMEN	283 KING STREET	SEATTLE	206-899-6666	08-MAR-90	85233
102	NGAO	LADORIS	5 MODRANY	BRATISLAVA	586-355-8882	08-MAR-90	85233
103	NAGAYAMA	MIDORI	68 VIA CENTRAL E	SAO PAULO	254-852-5764	17-JUN-91	85225
104	QUICK-TO-SEE	MARK	6921 KING WAY	LAGOS	63-559-7777	07-APR-90	85233
105	ROPEBURN	AUDRY	86 CHU STREET	HONG KONG	41-559-87	18-JAN-91	85233
106	URGUHART	MOLLY	3035 LAURIER	QUEBEC	418-542-9988	18-JAN-91	85225

12) create PHONE_ZIP view:
SQL> CREATE OR REPLACE VIEW phone_zip
(member_id, phone, join_date, zip)
AS SELECT member_id, phone, join_date, zip
FROM member
WITH READ ONLY;

13) display all rows of PHONE_ZIP view;
SQL> SELECT * FROM phone_zip WHERE join_date > '01-DEC-90';

MEMBER_ID	PHONE	JOIN_DATE	ZIP
103	254-852-5764	17-JUN-91	85225
105	41-559-87	18-JAN-91	85233
106	418-542-9988	18-JAN-91	85225