

```

CREATE TABLE CITIZEN (
    C_ID NUMBER (3),
    C_NAME VARCHAR2 (10),
    C_HOME VARCHAR2 (10),
    AGE NUMBER (2),
    OCCUPATION VARCHAR2 (15),
    GENDER VARCHAR2 (6),
    SALARY NUMBER,
    CONSTRAINTS PK_CITIZEN PRIMARY KEY (C_ID)
);

```

```

INSERT INTO CITIZEN VALUES (1, 'A', 'Dhaka', 25, 'Teacher', 'Male', 50000);
INSERT INTO CITIZEN VALUES (2, 'B', 'Dhaka', 56, 'Service', 'Male', 60000);
INSERT INTO CITIZEN VALUES (3, 'C', 'Ctg', 71, 'Retired', 'Male', 10000);
INSERT INTO CITIZEN VALUES (4, 'D', 'Ctg', 13, 'Student', 'Female', 500);
INSERT INTO CITIZEN VALUES (5, 'E', 'Dhaka', 45, 'Service', 'Male', 40000);
INSERT INTO CITIZEN VALUES (6, 'F', 'Gazipur', 54, 'Doctor', 'Female',
55000);
INSERT INTO CITIZEN VALUES (7, 'G', 'Gazipur', 65, 'Musician', 'Female',
5000);
INSERT INTO CITIZEN VALUES (8, 'H', 'Dhaka', 56, 'Engineer', 'Male', 60000);
INSERT INTO CITIZEN VALUES (9, 'I', 'Ctg', 23, 'Student', 'Male', 1000);
INSERT INTO CITIZEN VALUES (10, 'J', 'Comilla', 32, 'Teacher', 'Male',
45000);
INSERT INTO CITIZEN VALUES (11, 'K', 'Comilla', 51, 'Farmer', 'Male',
20000);
INSERT INTO CITIZEN VALUES (12, 'L', 'Khulna', 15, 'Student', 'Female',
1500);
INSERT INTO CITIZEN VALUES (13, 'M', 'Ctg', 25, 'Business', 'Male', 100000);
INSERT INTO CITIZEN VALUES (14, 'N', 'Comilla', 52, 'Doctor', 'Male',
70000);
INSERT INTO CITIZEN VALUES (15, 'O', 'Gazipur', 53, 'Teacher', 'Male',
50000);
INSERT INTO CITIZEN VALUES (16, 'P', 'Dhaka', 35, 'Musician', 'Female',
50000);
INSERT INTO CITIZEN VALUES (17, 'Q', 'Khulna', 43, 'Service', 'Male',
50000);
INSERT INTO CITIZEN VALUES (18, 'R', 'Khulna', 34, 'Service', 'Female',
45000);
INSERT INTO CITIZEN VALUES (19, 'S', 'Ctg', 16, 'Student', 'Male', 500);

```

Now try to perform the following queries (on the 'citizen' table):

i. Show all the values of citizen table

```

SELECT *
FROM CITIZEN;

```

ii. Show only the c_name, age and occupation from the table

```

SELECT C_NAME, AGE, OCCUPATION
FROM CITIZEN;

```

- iii. Show the name of the person who are living in Dhaka.

```
SELECT C_NAME
FROM CITIZEN
WHERE C_HOME='Dhaka';
```

- iv. make a list of people who have income more than 50,000/-

```
SELECT *
FROM CITIZEN
WHERE SALARY>=50000;
```

- v. show the names and hometowns of those person where the age is less than 45

```
SELECT C_NAME,C_HOME
FROM CITIZEN
WHERE AGE<45;
```

- vi. make a list of the female citizens

```
SELECT *
FROM CITIZEN
WHERE GENDER='Female';
```

- vii. What is the maximum salary?

```
SELECT MAX(SALARY)
FROM CITIZEN;
```

- viii. Which male person has the maximum income? [Hint: nested query]

```
SELECT C_NAME, SALARY
FROM CITIZEN
WHERE GENDER='Male' AND SALARY= (SELECT MAX(SALARY) FROM CITIZEN
WHERE GENDER='Male');
```

*****HAVE U UNDERSTOOD WHY I HAVE CHECKED THE GENDER BOTH IN THE
INNER AND OUTER SQL??*****

- ix. Which female person has the least income? [Hint: Nested Query]

```
SELECT C_NAME, SALARY
FROM CITIZEN
WHERE GENDER='Female' AND SALARY= (SELECT MIN(SALARY) FROM CITIZEN
WHERE GENDER='Female');
```

- x. Which teacher has the most income?

```
SELECT C_NAME, OCCUPATION
```

```
FROM CITIZEN
WHERE OCCUPATION='Teacher' AND SALARY=(SELECT MAX(SALARY) FROM
CITIZEN WHERE OCCUPATION = 'Teacher');
```

xi. Who is the most earning student?

```
SELECT C_NAME, OCCUPATION
FROM CITIZEN
WHERE OCCUPATION='Student' AND SALARY=(SELECT MAX(SALARY) FROM
CITIZEN WHERE OCCUPATION = 'Student');
```

xii. Show the list of citizens where the occupations might be either doctor or teacher.

```
SELECT *
FROM CITIZEN
WHERE OCCUPATION='Teacher' OR OCCUPATION='Doctor';
```

xiii. Make a ordered list of engineers according to the salary

```
SELECT *
FROM CITIZEN
WHERE OCCUPATION='Engineer'
ORDER BY SALARY;
```

xiv. Make a descending ordered list based on the age and show the names and age only.

```
SELECT C_NAME, AGE
FROM CITIZEN
ORDER BY AGE;
```

xv. What is the average salary of this table?

```
SELECT AVG(SALARY)
FROM CITIZEN;
```

xvi. What is the total income of all the teachers of the table?

```
SELECT SUM(SALARY)
FROM CITIZEN
WHERE OCCUPATION='Teacher';
```

xvii. What is the average income of the doctors?

```
SELECT AVG(SALARY)
FROM CITIZEN
WHERE OCCUPATION='Doctor';
```

xviii. Show the name of the least earning student?

```
SELECT C_NAME, SALARY
FROM CITIZEN
```

```
dbms_lab4_solution.txt
WHERE OCCUPATION='Student' AND SALARY=( SELECT MIN(SALARY) FROM
CITIZEN WHERE OCCUPATION='Student');
```

xix. Show the description of the maximum earning teacher.

```
SELECT *
FROM CITIZEN
WHERE OCCUPATION='Teacher' AND SALARY= (SELECT MAX(SALARY) FROM
CITIZEN WHERE OCCUPATION='Teacher');
```

xx. Make a list of all the distinct c_home values in the tables. Rename the output column as 'Unique_District'

```
SELECT DISTINCT C_HOME AS UNIQUE_DISTRICT
FROM CITIZEN;
```

xxi. What will be the age of all the employees after 5 years?

```
SELECT C_NAME , AGE+5
FROM CITIZEN;
```

xxii. What is the average age of the students?

```
SELECT AVG(AGE)
FROM CITIZEN
WHERE OCCUPATION='Student';
```

xxiii. Make a list of male citizens who earn more than 40000 per month.

```
SELECT *
FROM CITIZEN
WHERE GENDER='Male' AND SALARY>40000;
```

xxiv. Make a list of citizen which will show how many citizen belong to which occupations. [hint-use group by statement]

```
SELECT OCCUPATION, COUNT(C_NAME)
FROM CITIZEN
GROUP BY OCCUPATION;
```

xxv. Find the maximum salary of each occupation.

```
SELECT OCCUPATION, MAX(SALARY)
FROM CITIZEN
GROUP BY OCCUPATION;
```

xxvi. Categorize the average salary of male citizens based on occupation

```
SELECT OCCUPATION , AVG(SALARY)
FROM CITIZEN
WHERE GENDER='Male'
GROUP BY OCCUPATION;
```

xxvii. Categorize the average salary of male citizens based on occupation where the average salary is at least 10000.

```
SELECT OCCUPATION , AVG(SALARY)
FROM CITIZEN
WHERE GENDER='Male'
GROUP BY OCCUPATION
HAVING AVG(SALARY)>10000;
```

xxviii. Find the STD, DEPT table from the referencedTable doc. create the tables and insert the values.

a. Now find a list containing the std_name, std_cg and dept_name of the CSE department.

```
SELECT STD.STD_NAME, DEPT.DEPT_NAME, STD.STD_CG
FROM STD,DEPT
WHERE STD.STD_DEPT= DEPT.DEPT_ID;
```