



**BUBT** | BANGLADESH UNIVERSITY OF  
BUSINESS AND TECHNOLOGY  
*Committed to Academic Excellence*

## ASSIGNMENT-01

Course Title : Database Systems Lab

Course Code : CSE 208

### **Submitted By :**

Name : Md. Mursalin Hasan Nirob

ID No : 21225103423

Intake : 49

Section : 10

Program : B.Sc. Engg. in CSE

### **Submitted To :**

Name : Sheikh Moonwara Anjum Monisha

Lecturer

Department of : CSE

Bangladesh University of Business & Technology

**Date of Submission : 19/09/2023**

1. List all the values stored in the CITIZEN table.

C_ID	C_NAME	C_HOME	AGE	OCCUPATION	GENDER	SALARY
1	Alice	Dhaka	25	Teacher	Male	50000
2	Bob	Dhaka	56	Service	Male	60000
3	Charlie	Ctg	71	Retired	Male	10000
4	Erin	Ctg	13	Student	Female	500
5	Dave	Dhaka	45	Service	Male	40000
6	Faythe	Gazipur	54	Doctor	Female	55000
7	Grace	Gazipur	65	Musician	Female	5000
8	Ivan	Dhaka	56	Engineer	Male	60000
9	Frank	Ctg	23	Student	Male	1000
10	Micheal	Comilla	32	Teacher	Male	45000
11	Niaj	Comilla	51	Farmer	Male	20000
12	Heidi	Khulna	15	Student	Female	1500
13	Ted	Ctg	25	Business	Male	100000
14	Walter	Comilla	52	Doctor	Male	70000
15	Victor	Gazipur	53	Teacher	Male	50000
16	Judy	Dhaka	35	Musician	Female	50000
17	Pat	Khulna	43	Service	Male	50000
18	Olivia	Khulna	34	Service	Female	45000
19	Trent	Ctg	16	Student	Male	500
20	Peggy	Comilla	32	Business	Female	120000
21	Wendy	Ctg	25	Musician	Female	100000
22	Oscar	Gazipur	14	Student	Male	400
23	Mallet	Dhaka	25	Engineer	Male	50000

**Solve:**

CREATE DATABASE Assignment;

CREATE TABLE CITIZEN(C\_ID INT ,C\_NAME varchar(20),C\_HOME varchar(20), AGE INT, OCCUPATION varchar(20) , GENDER varchar(20),SALARY INT);

INSERT INTO CITIZEN VALUES(1," Alice", "Dhaka", 25, "Teacher"," Male" ,50000);

INSERT INTO CITIZEN VALUES(4," Erin", "Ctg", 13, "Student"," Female" ,500);

INSERT INTO CITIZEN VALUES(5," Dave", "Dhaka", 45, "Service"," Male" ,40000);

INSERT INTO CITIZEN VALUES(6," Faythe", "Gazipur", 54, "Doctor"," Female",55000);

INSERT INTO CITIZEN VALUES(7," Grace", "Gazipur", 65, "Musician"," Female",5000);

INSERT INTO CITIZEN VALUES(8," Ivan", "Dhaka", 56 , "Engineer"," Male" ,60000);

INSERT INTO CITIZEN VALUES(9," Frank", "Ctg", 23, "Student"," Male" ,1000);

INSERT INTO CITIZEN VALUES(10," Micheal", "Comilla ", 32,"Teacher","Male",45000);

INSERT INTO CITIZEN VALUES(11," Niaj", "Comilla", 51, "Farmer"," Male" ,20000);

INSERT INTO CITIZEN VALUES(12," Heidi", "Khulna",15, "Student"," Female" ,1500);

INSERT INTO CITIZEN VALUES(13," Ted", "Ctg",25, "Business"," Male" ,100000);

INSERT INTO CITIZEN VALUES(14," Walter", "Comilla", 52, "Doctor"," Male" ,70000);

INSERT INTO CITIZEN VALUES(15," Victor", "Gazipur", 53, "Teacher"," Male" ,50000);

```
INSERT INTO CITIZEN VALUES(16," Judy", "Dhaka",35, "Musician"," Female" ,50000);
INSERT INTO CITIZEN VALUES(17," Pat", "Khulna",43, "Service"," Male" ,50000);
INSERT INTO CITIZEN VALUES(18," Olivia", "Khulna", 34, "Service"," Female",45000);
INSERT INTO CITIZEN VALUES(19," Trent", "Ctg", 16, "Student"," Male" ,500);
INSERT INTO CITIZEN VALUES(20," Peggy","Comilla",32,"Business", "Female", 120000);
INSERT INTO CITIZEN VALUES(21," Wendy", "Ctg", 25, "Musician"," Female" ,100000);
INSERT INTO CITIZEN VALUES(22," Oscar", "Gazipur ",14 , "Student"," Male" ,400);
INSERT INTO CITIZEN VALUES(23," Mallet", "Dhaka", 25, "Engineer"," Male" ,50000);
```

**2. Show the NAME of the persons who are living in 'Dhaka'.**

```
C_NAME
Alice
Bob
Dave
Ivan
Judy
Mallet
```

**Solve:** SELECT C\_NAME FROM CITIZEN WHERE C\_HOME = "Dhaka";

**3. Show only the C NAME, AGE and OCCUPATION from the table.**

C_NAME	AGE	OCCUPATION
Alice	25	Teacher
Bob	56	Service
Charlie	71	Retired
Erin	13	Student
Dave	45	Service
Faythe	54	Doctor
Grace	65	Musician
Ivan	56	Engineer
Frank	23	Student
Micheal	32	Teacher
Niaj	51	Farmer
Heidi	15	Student
Ted	25	Business
Walter	52	Doctor
Victor	53	Teacher
Judy	35	Musician
Pat	43	Service
Olivia	34	Service
Trent	16	Student
Peggy	32	Business
Wendy	25	Musician
Oscar	14	Student
Mallet	25	Engineer

**Solve:** SELECT C\_NAME , AGE , OCCUPATION FROM CITIZEN WHERE 1;

4. Make a list of people who have income of at least 50,000.

C_ID	C_NAME	C_HOME	AGE	OCCUPATION	GENDER	SALARY
1	Alice	Dhaka	25	Teacher	Male	50000
2	Bob	Dhaka	56	Service	Male	60000
6	Faythe	Gazipur	54	Doctor	Female	55000
8	Ivan	Dhaka	56	Engineer	Male	60000
13	Ted	Ctg	25	Business	Male	100000
14	Walter	Comilla	52	Doctor	Male	70000
15	Victor	Gazipur	53	Teacher	Male	50000
16	Judy	Dhaka	35	Musician	Female	50000
17	Pat	Khulna	43	Service	Male	50000
20	Peggy	Comilla	32	Business	Female	120000
21	Wendy	Ctg	25	Musician	Female	100000
23	Mallet	Dhaka	25	Engineer	Male	50000

**Solve:** SELECT \* FROM CITIZEN WHERE SALARY >= 50000;

5. Make a list of all the distinct C\_HOME values in the tables. Rename the output column as Unique District.

```
UNIQUE_DIS
Ctg
Gazipur
Comilla
Dhaka
Khulna
```

**Solve:** SELECT DISTINCT C\_HOME AS UNIQUE\_DIS FROM CITIZEN WHERE 1;

6. What is the maximum salary?

```
MAX(SALARY)
120000
```

**Solve:** SELECT MAX(SALARY) FROM CITIZEN WHERE 1;

7. What is the average age of the students?

```
AVG(AGE)
16.2
```

**Solve:** SELECT AVG(AGE) FROM CITIZEN WHERE OCCUPATION = "Student" ;

8. Make an ordered list of engineers according to the salary.

C_ID	C_NAME	C_HOME	AGE	OCCUPATION	GENDER	SALARY
23	Mallet	Dhaka	25	Engineer	Male	50000
8	Ivan	Dhaka	56	Engineer	Male	60000

**Solve:** SELECT \* FROM CITIZEN WHERE OCCUPATION = "Engineer" ORDER BY  
SALARY ASC;

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

**TOTAL SALARY TEACHER**  
**145000**

**Solve:** SELECT SUM(SALARY) AS "TOTAL SALARY TEACHER" FROM CITIZEN  
WHERE OCCUPATION = "Teacher";

**10. Who is the most earning student? [Hint: Nested Query]**

<b><u>C_NAME</u></b>	<b><u>OCCUPATION</u></b>
Heidi	Student

**Solve :** SELECT \* FROM CITIZEN WHERE OCCUPATION = "Student" ORDER BY DESC  
LIMIT 1;

**11. Which female person has the least income? [Hint: Nested Query]**

<b><u>C_NAME</u></b>	<b><u>SALARY</u></b>
Erin	500

**Solve:** SELECT \* FROM CITIZEN WHERE GENDER = "Female" ORDER BY ASC LIMIT  
1;