

AHMED M. S. ALBREEM

Std.id : 210041258

COURSE.NO : CSE4308

DATE OF SOLUTION : 17-08-2023

### ASSIGNMENT 1 OF DBMS LAB

FIRST TASK : CREATING USERNAME AND PASSWORD :

Username : 210041258 && Password : cse4308

The solution is connected to the database successfully with the top information .

| مادة                     | تفاصيلها          | التاريخ      | الايام | الخطه            | اليوم/الفترة   | bef.mor(3-4) am          | mor(5-6) am           | eve (4-5) pm                  | aft.eve(6-7) pm          |
|--------------------------|-------------------|--------------|--------|------------------|----------------|--------------------------|-----------------------|-------------------------------|--------------------------|
| جبر خطي                  | 3                 |              |        |                  |                |                          | معمل هياكل بيانات     | معمل دوائر الاجهزة الكهربائية | دوائر الاجهزة الكهربائية |
| دوائر الاجهزة الكهربائية |                   |              |        |                  | ادارة البيانات | جبر الخطي                | معمل ادارة بيانات     | لغة سي بلس بلس                |                          |
| لغة سي بلس بلس           |                   |              |        |                  | دوائر الاجهزة  | معمل سي بلس بلس          | تنظيم و عمارة كمبيوتر | هياكل بيانات                  |                          |
| هياكل بيانات             |                   |              |        |                  | تنظيم و عمارة  | معمل هياكل بيانات        | جبر الخطي             | ادارة البيانات                |                          |
| ادارة قواعد بيانات       |                   |              |        |                  | الاربعاء       | دوائر الاجهزة الكهربائية | معمل ادارة بيانات     | لغة سي بلس بلس                | تنظيم و عمارة كمبيوتر    |
| تنظيم و عمارة الكمبيوتر  | 3                 | 9/10->24/11  | 47     | دراسة بشكل منتظم | الخميس         | جبر الخطي                | معمل سي بلس بلس       | ادارة البيانات                | معمل ادارة بيانات        |
| معامل                    | (2-1,3-3,4-3,5-2) | 24/11->28/11 | 5      | دراسة فاينال     | الجمعة         | لغة سي بلس بلس           | معمل سي بلس بلس       | معمل هياكل بيانات             | هياكل بيانات             |
|                          |                   | 28/11->14/12 | 17     | دراسة فاينال     |                |                          |                       |                               |                          |

Second Task : Write SQL statement to create a table 'STUDENT'

```
Code : CREATE TABLE STUDENT (

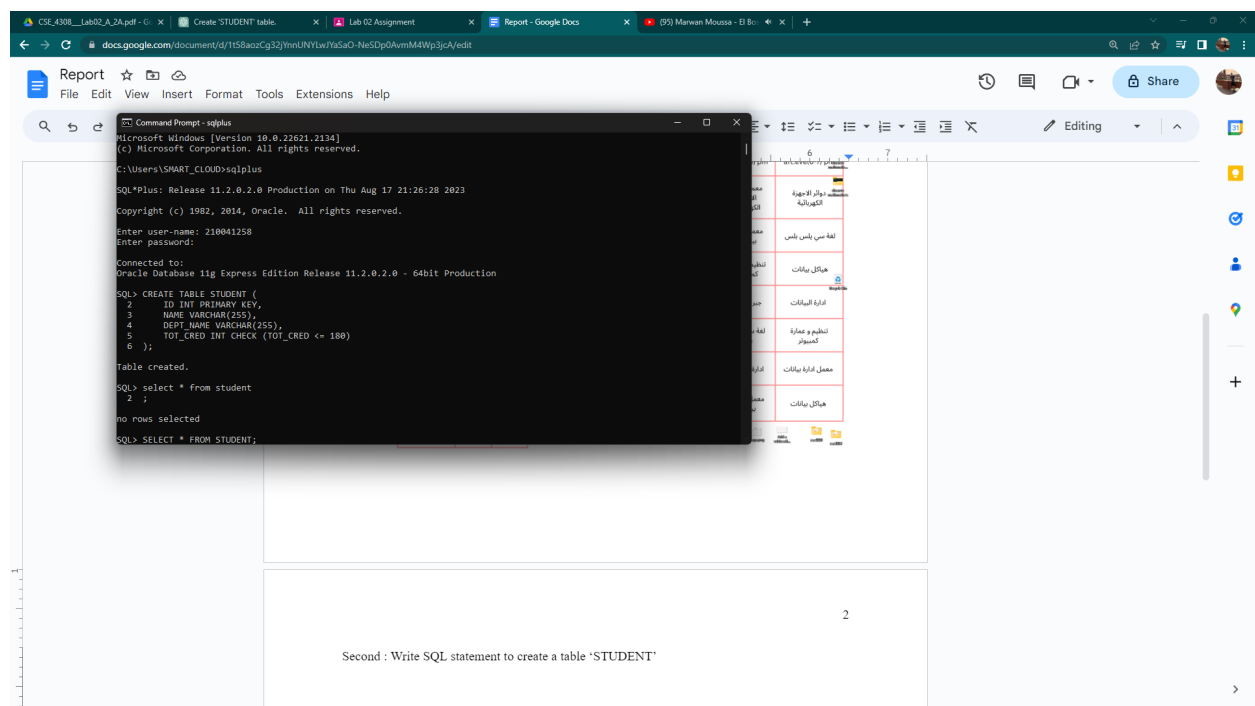
    ID INT PRIMARY KEY,

    NAME VARCHAR(255) ,

    DEPT_NAME VARCHAR(255) ,

    TOT_CRED INT CHECK (TOT_CRED <= 180)

);
```



Explaining the Task : “ we used the CREATE TABLE student means we want to create table in database as name “STUDENT” with ID as member in database in table as integer as primary key thats why chose “PRIMARY KEY ”, Also “NAME VARCHAR(255)” means i want to create name as string with limit 255 character , “DEPT\_NAME VARCHAR(255)” means i want to create Department name as string with maximum length 255 characters , also “TOT\_CRED INT CHECK (TOT\_CRED <= 180)” means i want to create total credit as integer but less than 180 .

```
SQL> INSERT INTO STUDENT VALUES (19991,'Brandt','History',80);
1 row created.
SQL> INSERT INTO STUDENT VALUES (23121,'Chavez','Finance',110);
1 row created.
SQL> INSERT INTO STUDENT VALUES (44553,'Peltier','Physics',56);
1 row created.
SQL> INSERT INTO STUDENT VALUES (45678,'Levy','Physics',46);
1 row created.
SQL> INSERT INTO STUDENT VALUES (54321,'Williams','Comp. Sci.',5);
1 row created.
SQL> INSERT INTO STUDENT VALUES (55739,'Sanchez','Music',38);
1 row created.
SQL> INSERT INTO STUDENT VALUES (70557,'Snow','Physics',0);
1 row created.
SQL> INSERT INTO STUDENT VALUES (76543,'Brown','Comp. Sci.',58);
1 row created.
SQL> INSERT INTO STUDENT VALUES (76653,'Aoi','Elec. Eng.',60);
1 row created.
SQL> INSERT INTO STUDENT VALUES (98765,'Bourikas','Elec. Eng.',9);
1 row created.
SQL> INSERT INTO STUDENT VALUES (98988,'Tanaka','Biology',120);
1 row created.
SQL>
```

Third Task : “ INSERTING VALUES INSIDE TABLE OF DATABASE ”

Code : “

INSERT INTO STUDENT VALUES (00128,'Zhang','Comp. Sci.',102);

INSERT INTO STUDENT VALUES (12345,'Shankar','Comp. Sci.',32);

INSERT INTO STUDENT VALUES (19991,'Brandt','History',80);

INSERT INTO STUDENT VALUES (23121,'Chavez','Finance',110);

INSERT INTO STUDENT VALUES (44553,'Peltier','Physics',56);

INSERT INTO STUDENT VALUES (45678,'Levy','Physics',46);

INSERT INTO STUDENT VALUES (54321,'Williams','Comp. Sci.',5);

```

INSERT INTO STUDENT VALUES (55739,'Sanchez','Music',38);
INSERT INTO STUDENT VALUES (70557,'Snow','Physics',0);
INSERT INTO STUDENT VALUES (76543,'Brown','Comp. Sci.',58);
INSERT INTO STUDENT VALUES (76653,'Aoi','Elec. Eng.',60);
INSERT INTO STUDENT VALUES (98765,'Bourikas','Elec. Eng.',9);
INSERT INTO STUDENT VALUES (98988,'Tanaka','Biology',120);
”

```

```
"INSERT INTO STUDENT VALUES (00128,'Zhang','Comp. Sci.',102);"
```

i used "INSERT INTO" to put the data with specific format as same i created in the beginning and student the name of table of database i want to insert values inside it, VALUES means the inserted values inside the table of the table , also we used ‘’ for character and string same for entry of the data , i insert all of them like that with semicolon ‘;’

And the return of cmd : “1 row created ” means it created the row in that table .

Task Four : “ Some Different of Operation in Table of database ”

```
" " SELECT * FROM STUDENT;" == "displaying all the entry data in table " "
```

```
Means displaying all the columns and rows in the table as 12 rows
```

```

Command Prompt - sqlplus
Aoi
Elec. Eng.
60

ID
-----
NAME
-----
DEPT_NAME
-----
TOT_CRED
-----
98765
Bourikas
Elec. Eng.
9

ID
-----
NAME
-----
DEPT_NAME
-----
TOT_CRED
-----
98988
Tanaka
Biology
120

12 rows selected.

SQL>

```

"SELECT ID, NAME FROM STUDENT;" means he displays of name and id from student table but just two columns id, name

```

Select Command Prompt - sqlplus

ID
-----
NAME
-----
55739
Sanchez

70557
Snow

76543
Brown

ID
-----
NAME
-----
76653
Aoi

98765
Bourikas

98988
Tanaka

12 rows selected.

SQL>

```

" SELECT NAME, DEPT\_NAME FROM STUDENT WHERE TOT\_CRED > 100; " == "displaying the name and department name from student when the total credit of student who has more than 100 " "there is just two student who have more than 100 as credit "

```
SQL> SELECT NAME, DEPT_NAME FROM STUDENT WHERE TOT_CRED > 100;
```

```
NAME
```

```
DEPT_NAME
```

```
Chavez  
Finance
```

```
Tanaka  
Biology
```

```
SQL>
```

“SELECT NAME, DEPT\_NAME FROM STUDENT WHERE TOT\_CRED BETWEEN 80 AND 120;” ==

“displaying the name and columns who have credit from 80 and 120 “

```
SQL> SELECT NAME, DEPT_NAME FROM STUDENT WHERE TOT_CRED > 100;

NAME
-----
DEPT_NAME
-----
Chavez
Finance

Tanaka
Biology

SQL> SELECT NAME, DEPT_NAME FROM STUDENT WHERE TOT_CRED BETWEEN 80 AND 120;

NAME
-----
DEPT_NAME
-----
Brandt
History

Chavez
Finance

Tanaka
Biology

SQL> _
```

“SELECT ID, NAME FROM STUDENT WHERE DEPT\_NAME = 'Comp. Sci.';” == “displaying the id and name columns from student table if there are in department name “ computer science ”

```
SQL> SELECT ID, NAME FROM STUDENT WHERE DEPT_NAME = 'Comp. Sci.';

      ID
-----
NAME
-----
    12345
Shankar

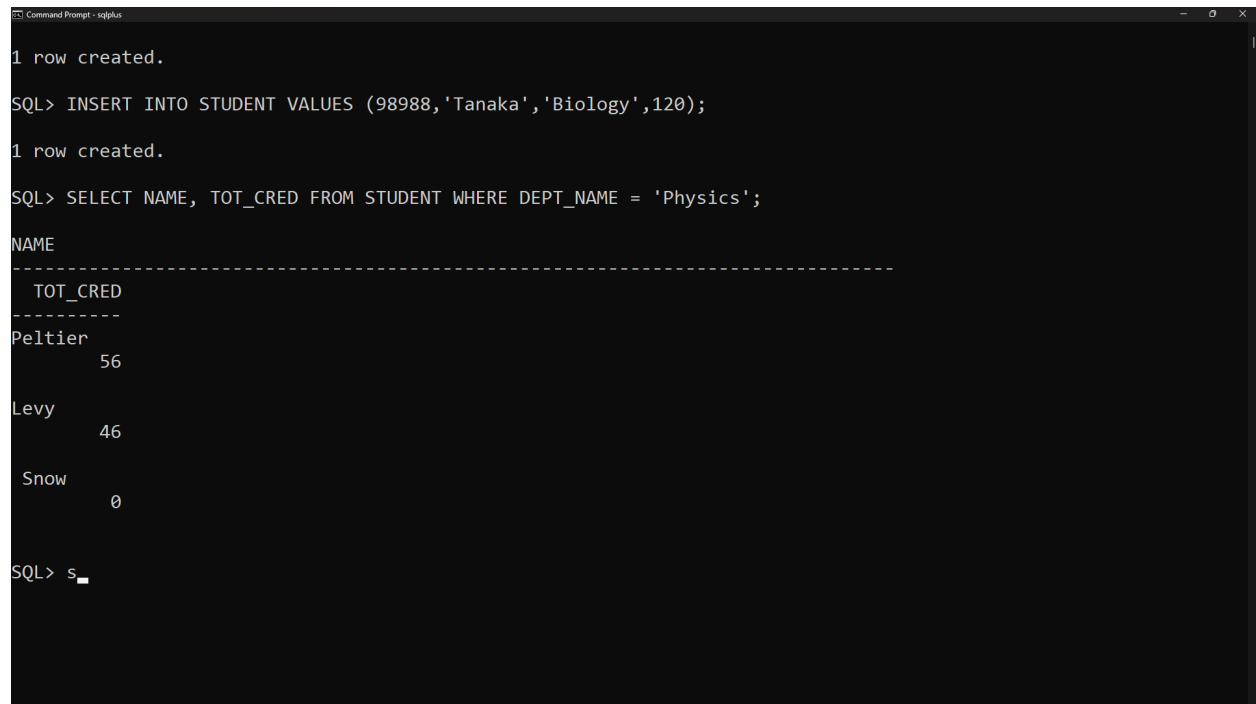
    54321
Williams

    76543
Brown

SQL> _
```

“SELECT NAME, TOT\_CRED FROM STUDENT WHERE DEPT\_NAME = 'Physics';” ==

“displaying the name and total credit from student if there department name is “physics” ”



```

SQL> INSERT INTO STUDENT VALUES (98988, 'Tanaka', 'Biology', 120);
1 row created.

SQL> SELECT NAME, TOT_CRED FROM STUDENT WHERE DEPT_NAME = 'Physics';
NAME
-----
TOT_CRED
-----
Peltier      56
Levy         46
Snow         0
SQL> s_

```

“SELECT ID, NAME FROM STUDENT WHERE DEPT\_NAME = 'Comp. Sci.' OR

TOT\_CRED < 10;” == “that will show the name and id from student table if there department

name is computer science or total credit less than 10 credit ”



```
SQL> SELECT ID, NAME FROM STUDENT WHERE DEPT_NAME = 'Comp. Sci.' OR TOT_CRED < 10;

      ID
-----
NAME
-----
    12345
Shankar

    54321
Williams

    70557
Snow

      ID
-----
NAME
-----
    76543
Brown

    98765
Bourikas

SQL>
```

“`SELECT DISTINCT DEPT_NAME FROM STUDENT;`” == “ displaying the unique values of the department from the table of student ” , the returned cmd answer as “no. of the rows it find value inside it in that table according to the order of the user ” ,Also “`DISTINCT`” means just unique values will be shown its just a attribute the values will be existed will have it a unique values

```
SQL> SELECT DISTINCT DEPT_NAME FROM STUDENT;

DEPT_NAME
-----
Elec. Eng.
Physics
Comp. Sci.
Finance
Biology
History
Music

7 rows selected.

SQL> _
```

TASK 5 :

"DROP TABLE STUDENT;" == "DROP MEANS DELETING THE TABLE NOT JUST THE CONTENT OF THE TABLE ALL OF THE TABLE STRUCTURE WILL BE DELETED AND THE INFORMATION INSIDE THE TABLE WILL BE DELETED ALSO "

```
SQL> DROP TABLE STUDENT;  
Table dropped.  
SQL>
```

THE PROBLEM I FACED IN THE ALL OF THE ASSIGNMENT IS JUST IN THE CLASS I DIDN'T HEAR VERY WELL BECAUSE I WAS AWAY FROM THE BOARD THAT'S WHY I DIDN'T SOLVE THE TASK IN THE LAB AT THAT MOMENT , BUT I USE THE ONLINE SOURCES TO MAKE IT MORE CLEAR THANK YOU .