**University of Engineering and Technology (New Campus),**

**Lahore**



# DBMS Lab

**Final Project**

**Project Name:**

**University Management System Database**

**Submitted By:**

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**Submitted To:**

**Sir Rehan**

**DATA DEFINITION LANGUAGE**

**CREATE COMMANDS**

**Create Command For Teacher Table:**

create table teacher(

Teach\_id int,

first\_name varchar(50),

last\_name varchar(50),

phone\_number bigint,

[state] varchar(30),

city varchar(30),

zip int,

date\_of\_birth date,

email\_id varchar(50),

Teach\_Dept varchar(50),

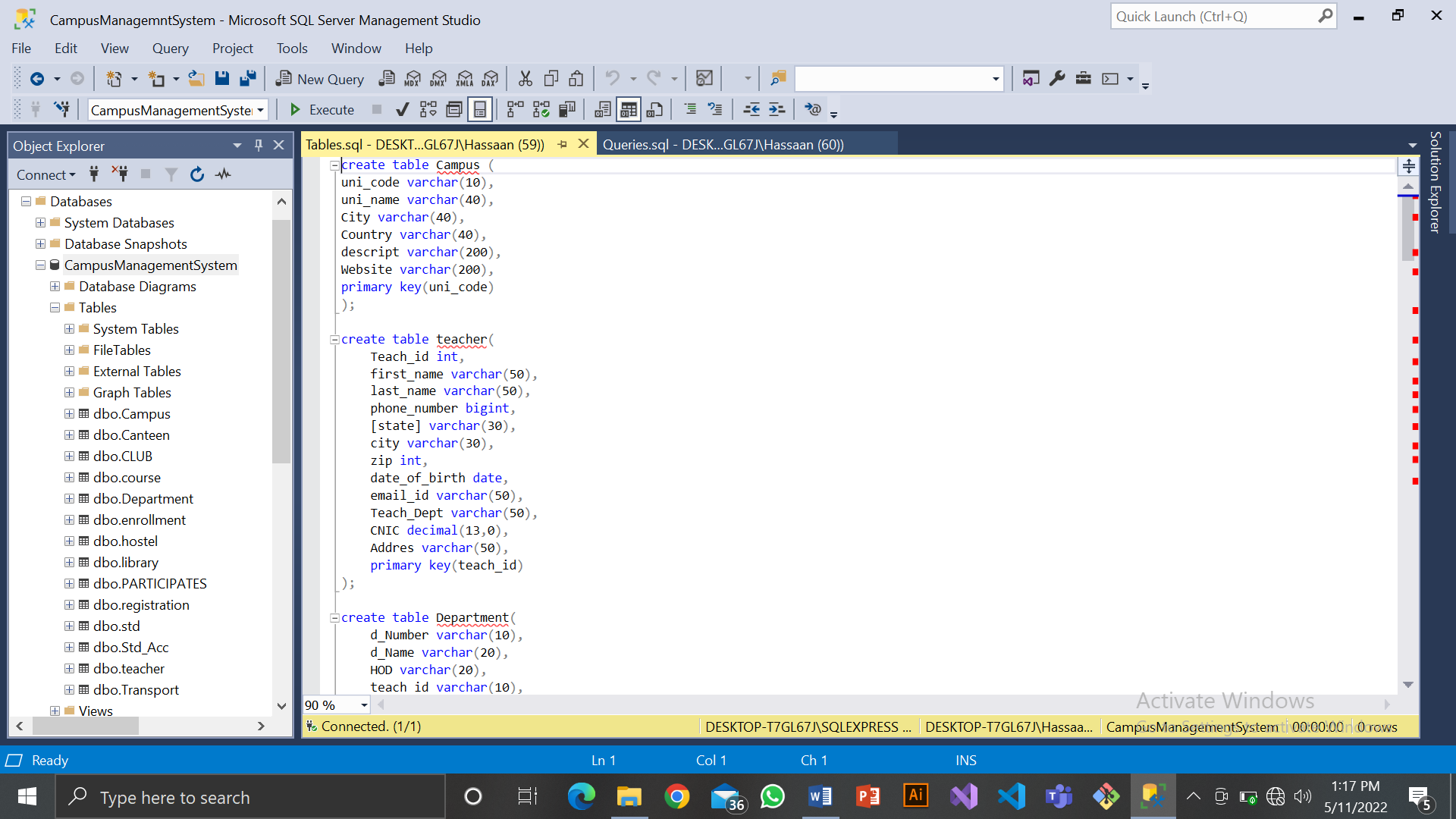
CNIC decimal(13,0),

Addres varchar(50),

primary key(teach\_id)

);

**OUTPUT SCREENSHOT**



**Create Command For Student Table:**

create table std(

std\_id varchar(10),

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(50),

gender VARCHAR(50),

SSN INT,

[state] VARCHAR(50),

city VARCHAR(50),

zip VARCHAR(50),

mobile\_number BIGINT,

date\_of\_birth DATE,

GPA DECIMAL(3,2),

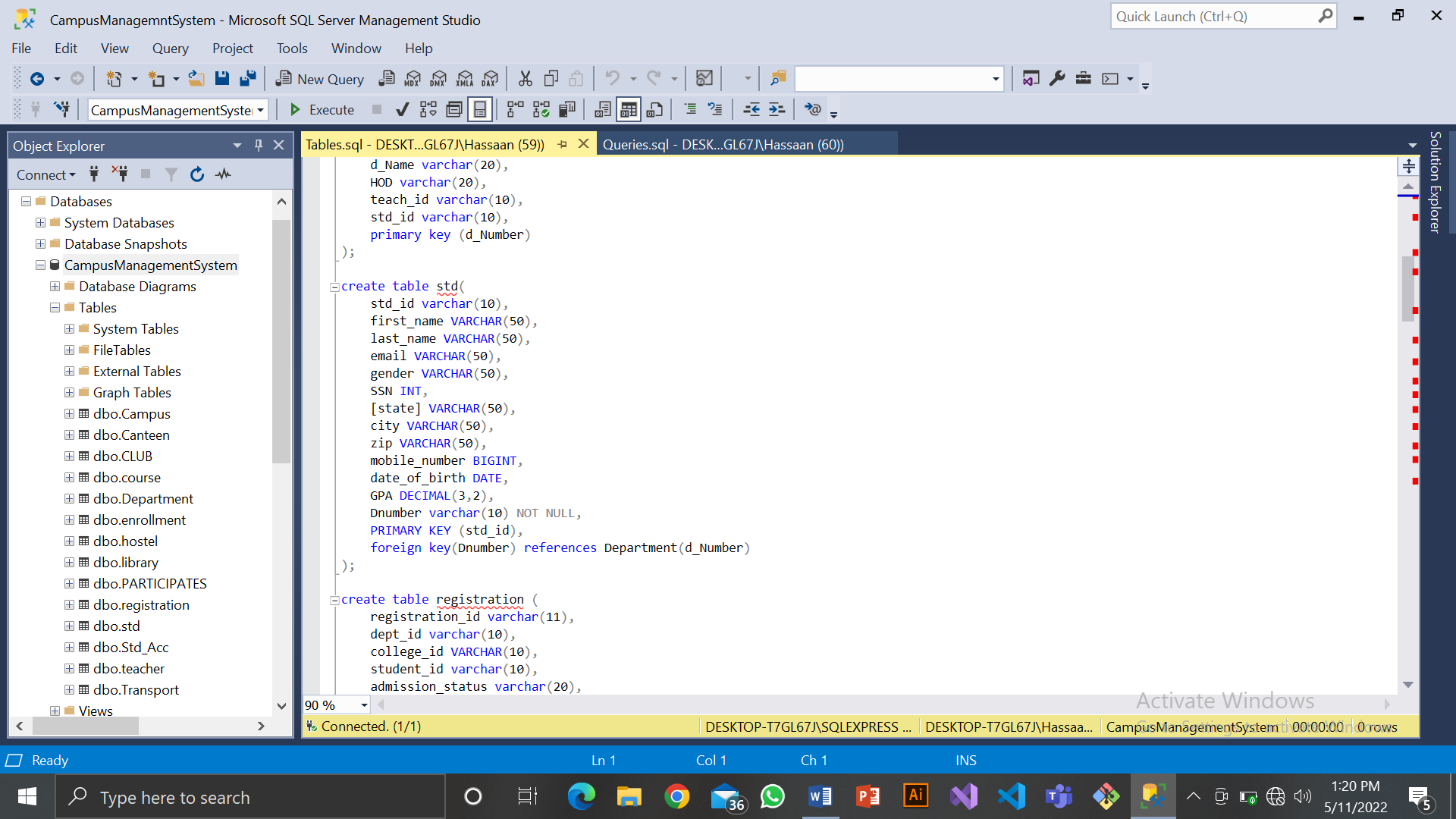
Dnumber varchar(10) NOT NULL,

PRIMARY KEY (std\_id),

foreign key(Dnumber) references Department(d\_Number)

);

**OUTPUT SCREENSHOT**



**Create Command For Registration Table:**

create table registration (

registration\_id varchar(11),

dept\_id varchar(10),

college\_id VARCHAR(10),

student\_id varchar(10),

admission\_status varchar(20),

year\_of\_application varchar(10),

degree\_type varchar(20),

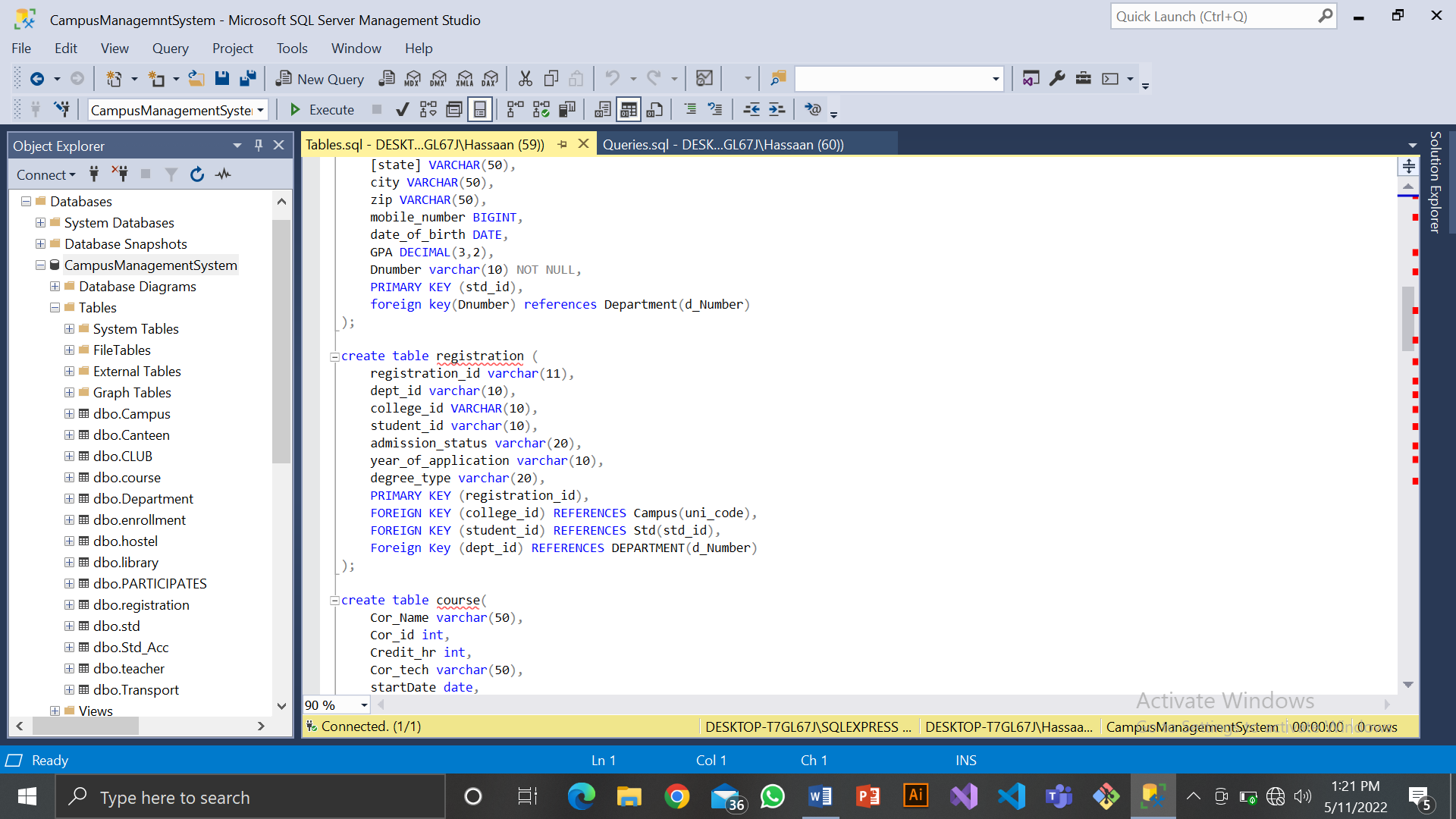
PRIMARY KEY (registration\_id),

FOREIGN KEY (college\_id) REFERENCES Campus(uni\_code),

FOREIGN KEY (student\_id) REFERENCES Std(std\_id),

Foreign Key (dept\_id) REFERENCES DEPARTMENT(d\_Number)

);**OUTPUT SCREENSHOT**

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**Create Command For Course Table:**

create table course(

Cor\_Name varchar(50),

Cor\_id int,

Credit\_hr int,

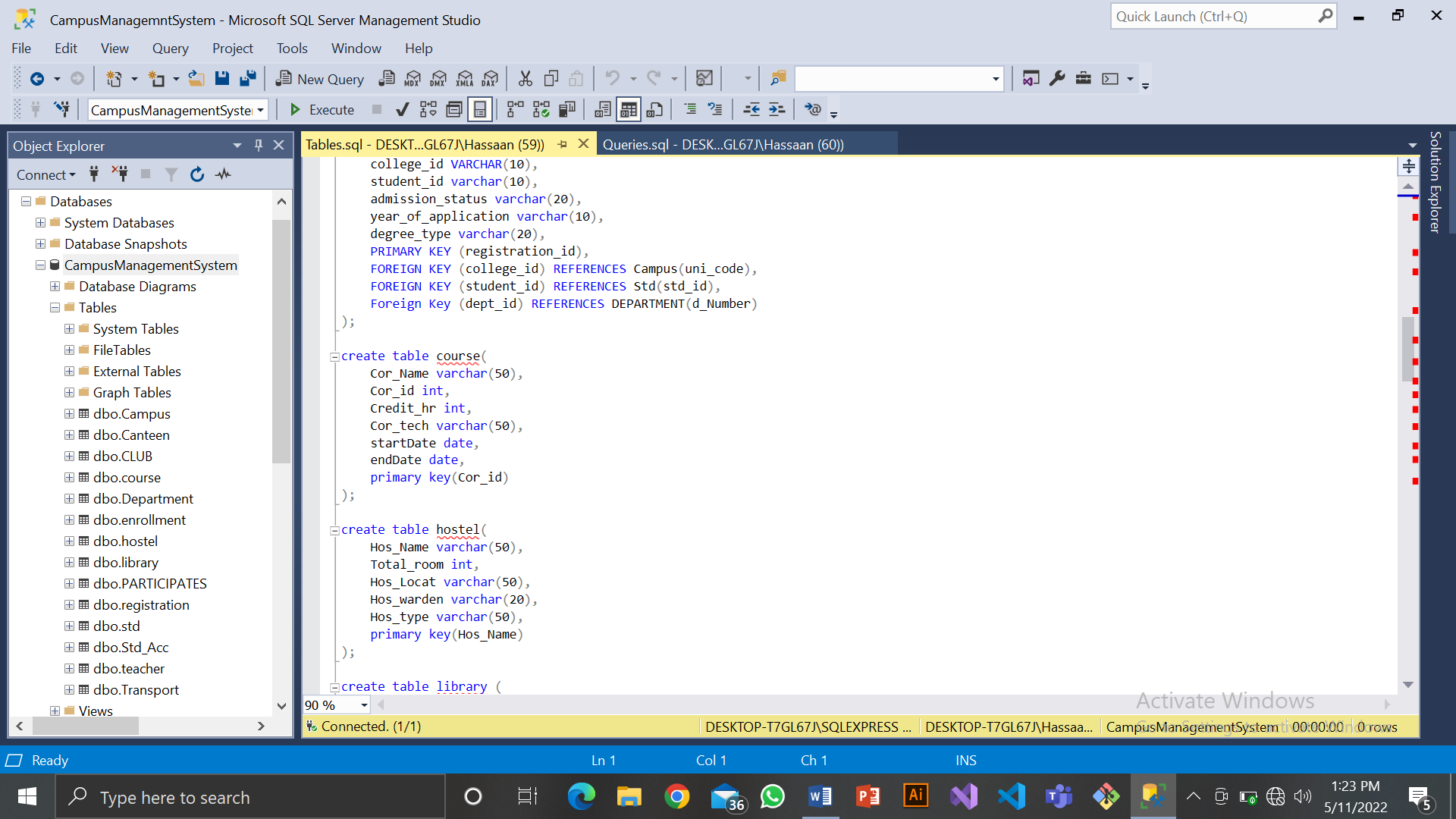
Cor\_tech varchar(50),

startDate date,

endDate date,

primary key(Cor\_id)

);**OUTPUT SCREENSHOT**



**Create Command For Hostel Table:**

create table hostel(

Hos\_Name varchar(50),

Total\_room int,

Hos\_Locat varchar(50),

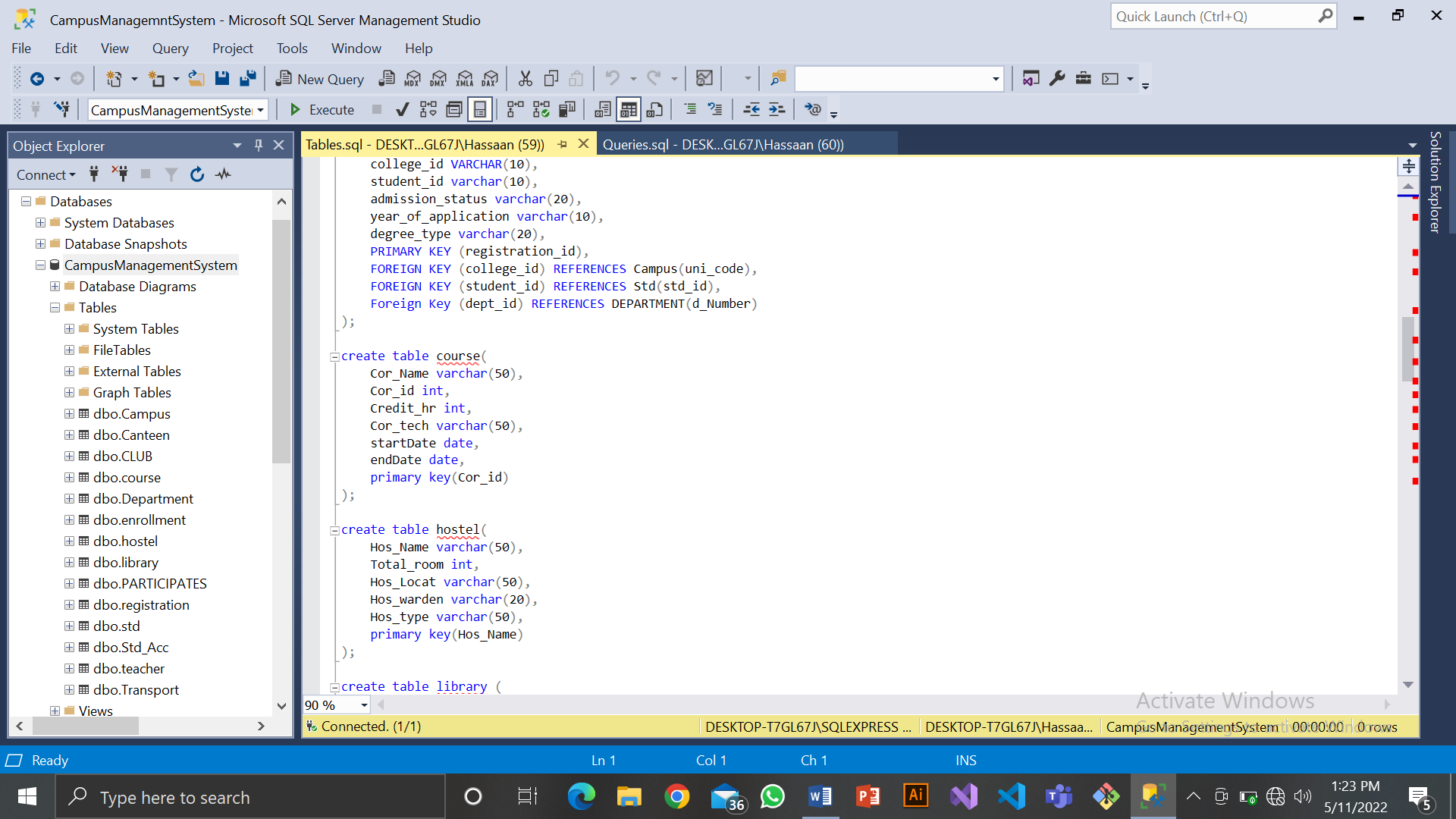
Hos\_warden varchar(20),

Hos\_type varchar(50),

primary key(Hos\_Name)

);

**OUTPUT SCREENSHOT**



**Create Command For Library Table:**

create table library (

lib\_branch int primary key not null,

lib\_location varchar(50),

book\_collection varchar(50)

);

**OUTPUT SCREENSHOT**



**Create Command For Canteen Table:**

create table Canteen (

cant\_branch int primary key not null,

cant\_location varchar(50),

avail\_Food varchar(50),

food\_price int

);

**OUTPUT SCREENSHOT**



**Create Command For Enrollment Table:**

create table enrollment (

std\_id varchar(10),

Cor\_id int,

foreign key (std\_id) references std(std\_id),

foreign key (Cor\_id) references course(Cor\_id),

primary key (std\_id,Cor\_id)

);

**OUTPUT SCREENSHOT**

****

**ALTER TABLE COMMANDS**

**Alter Table Command For Student Table**

* alter table std

add Bus\_no varchar(10),

club\_id varchar(10),

foreign key (club\_id) references CLUB (club\_id),

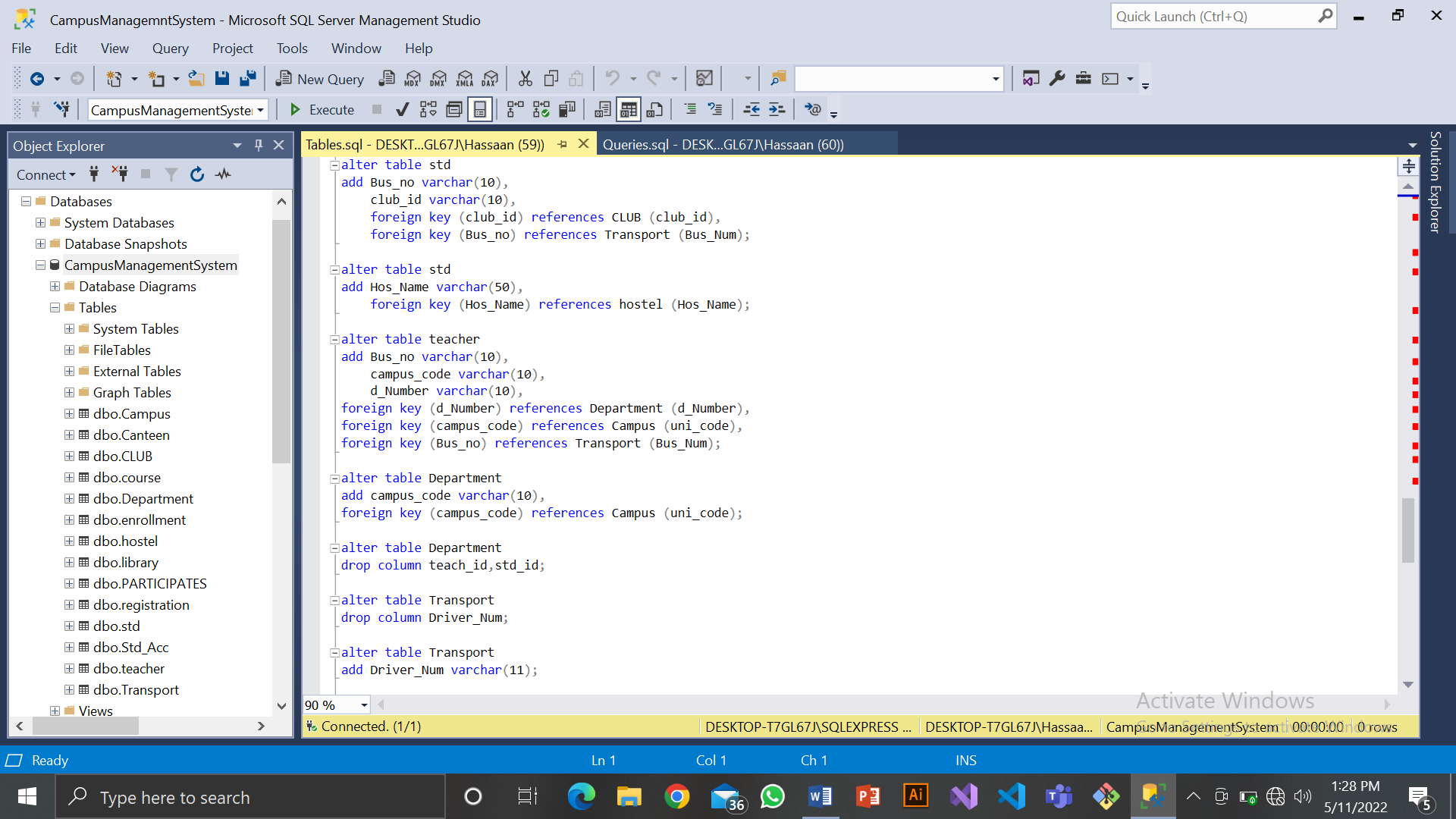
foreign key (Bus\_no) references Transport (Bus\_Num);

* alter table std

add Hos\_Name varchar(50),

foreign key (Hos\_Name) references hostel (Hos\_Name);

**OUTPUT SCREENSHOT**

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**Alter Table Command For Teacher Table**

* alter table teacher

add Bus\_no varchar(10),

campus\_code varchar(10),

d\_Number varchar(10),

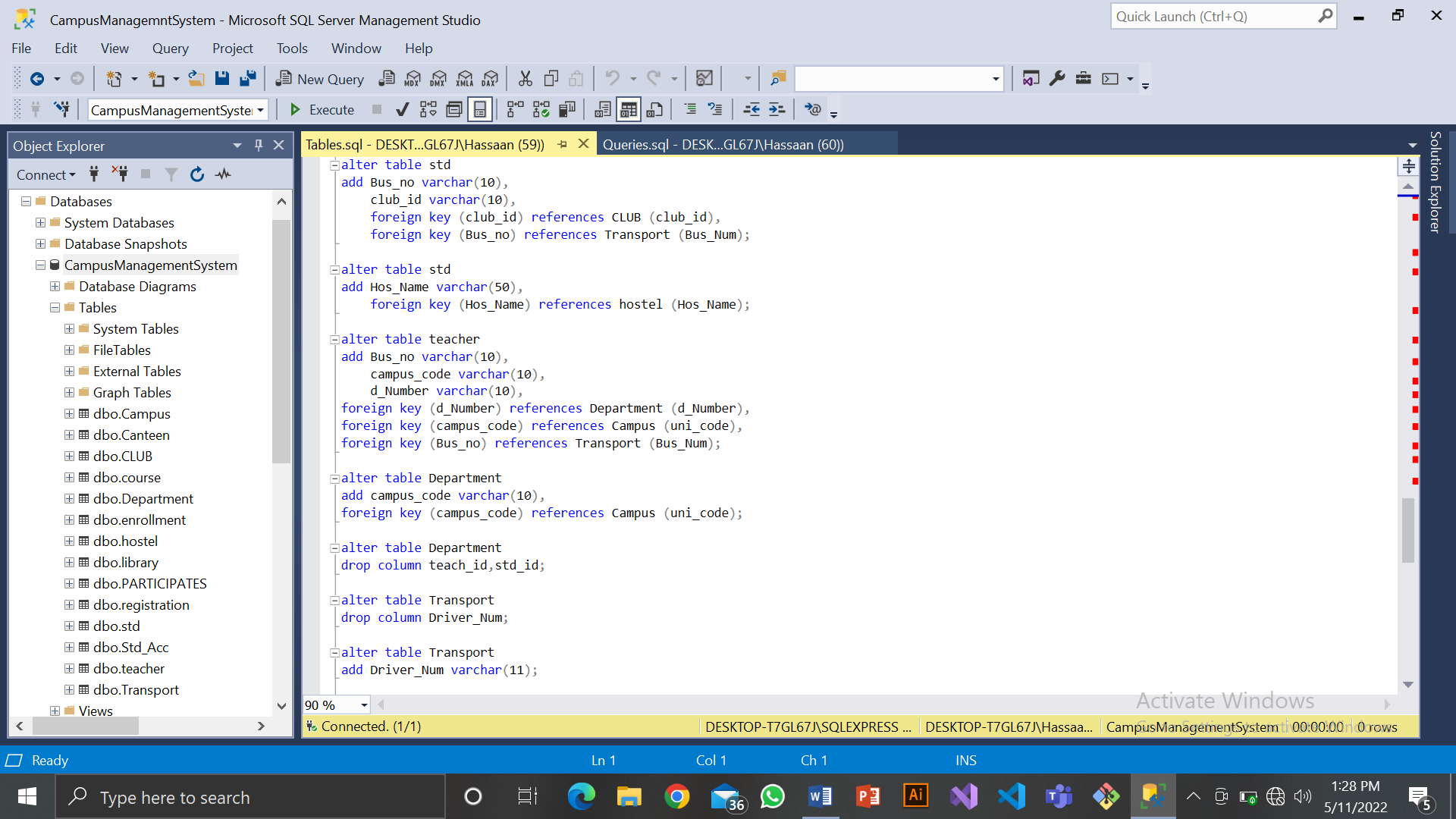
foreign key (d\_Number) references Department (d\_Number),

foreign key (campus\_code) references Campus (uni\_code),

foreign key (Bus\_no) references Transport (Bus\_Num);

add foreign key(cor\_id)references corse(cor\_id);

**OUTPUT SCREENSHOT**



**DATA MANIPULATION LANGUAGE**

**Insert Command For Department Table:**

insert into Department values

('A12e','CS','Mushtaq',01214),

('D15c','CE','Allah dita',01214),

('N11r','SE','Rizwan',01214),

('F62g','EE','Usman',01214),

('H19v','ME','Qasim',01522),

('Q11y','CE','Sunil',01522),

('B12e','Civil Engineering','Javed',03546),

('U82t','BBA','Shoiab',03546),

('C12c','BBIT','Danish',01095),

('X12z','Arts','Farukh',01095);

UPDATE Department

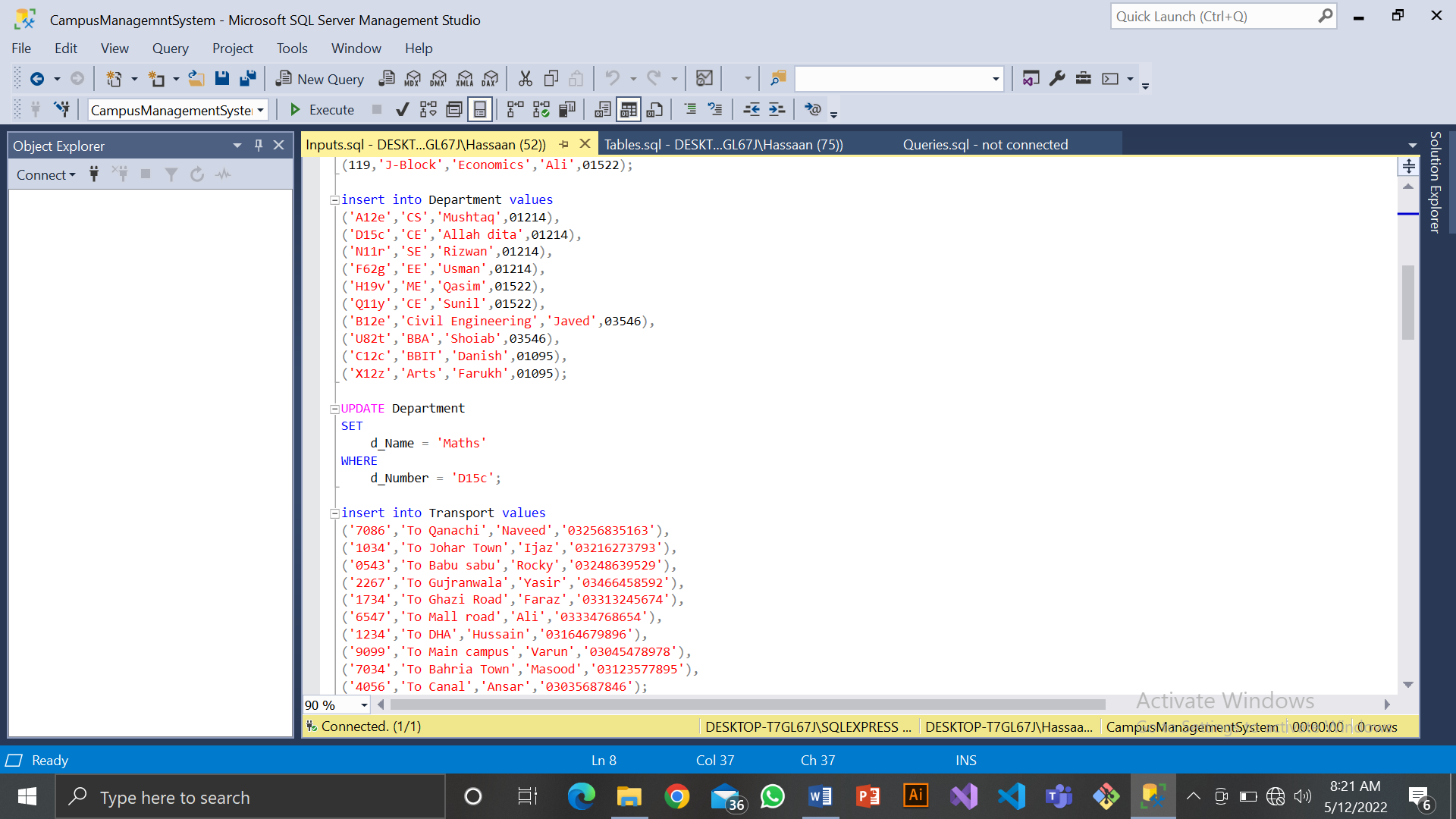
SET

d\_Name = 'Maths'

WHERE

d\_Number = 'D15c';

**OUTPUT SCREENSHOT**



**Insert Command For Canteen Table:**

insert into Canteen values

(210,'A-Block','Biryani',100,01214),

(211,'B-Block','Burger',80,01522),

(212,'C-Block','Qorma',120,03546),

(213,'D-Block','Daal',40,01095),

(214,'E-Block','Shawarma',70,01522),

(215,'F-Block','Pizza',200,01214),

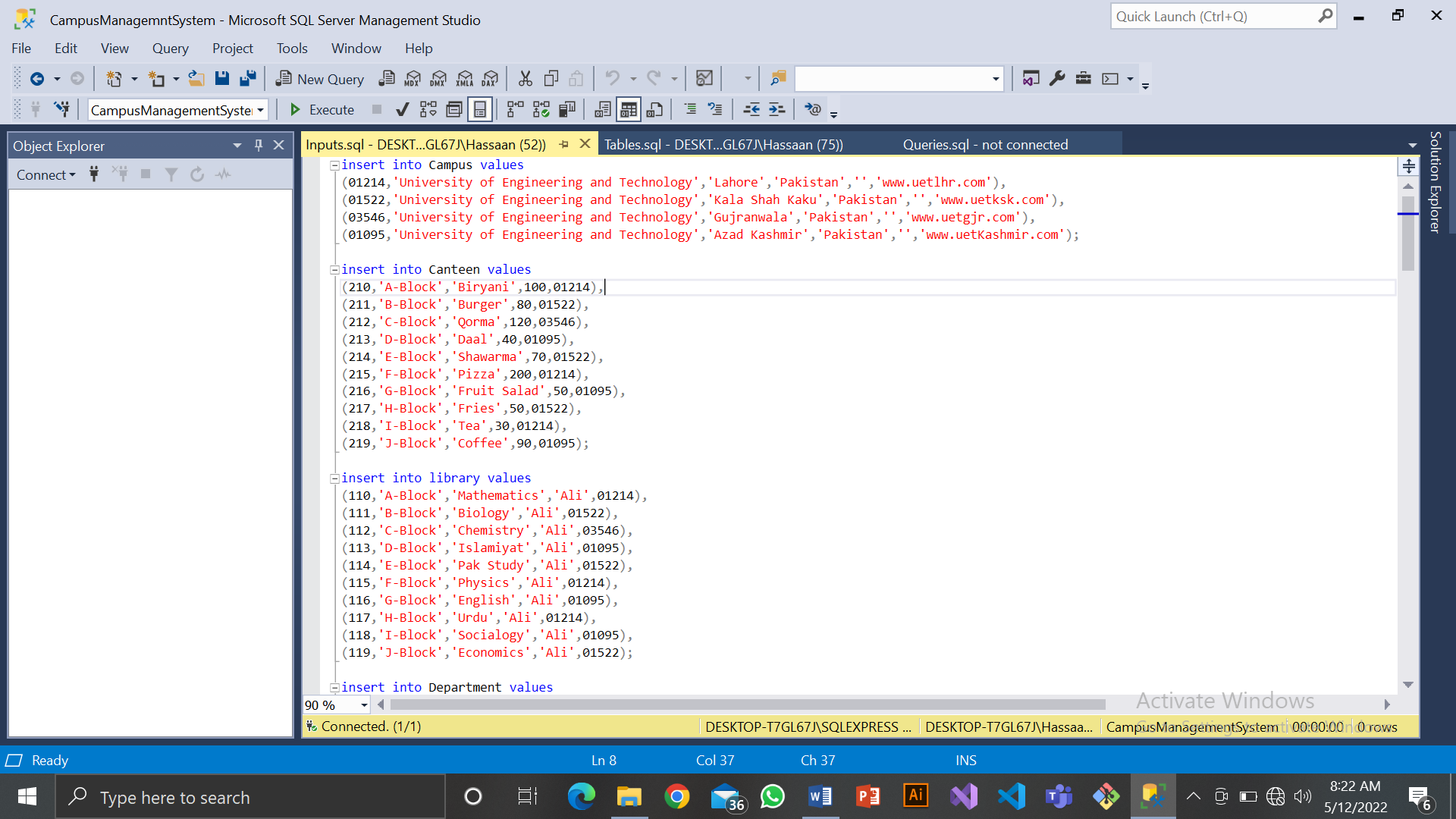
(216,'G-Block','Fruit Salad',50,01095),

(217,'H-Block','Fries',50,01522),

(218,'I-Block','Tea',30,01214),

(219,'J-Block','Coffee',90,01095)

;**OUTPUT SCREENSHOT**



**Insert Command For Library Table:**

insert into library values

(110,'A-Block','Mathematics','Ali',01214),

(111,'B-Block','Biology','Ali',01522),

(112,'C-Block','Chemistry','Ali',03546),

(113,'D-Block','Islamiyat','Ali',01095),

(114,'E-Block','Pak Study','Ali',01522),

(115,'F-Block','Physics','Ali',01214),

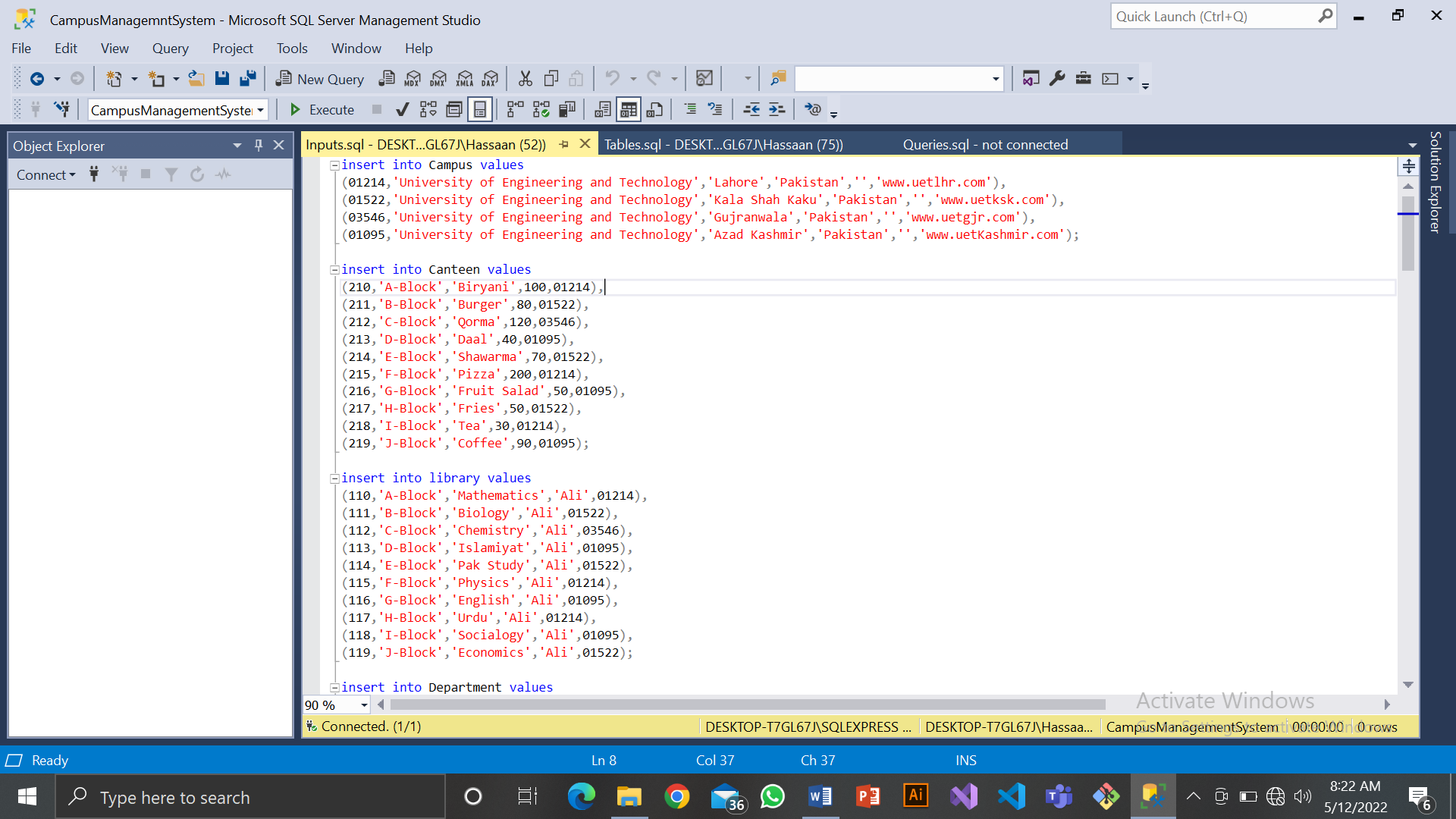
(116,'G-Block','English','Ali',01095),

(117,'H-Block','Urdu','Ali',01214),

(118,'I-Block','Socialogy','Ali',01095),

(119,'J-Block','Economics','Ali',01522);

**OUTPUT SCREENSHOT**

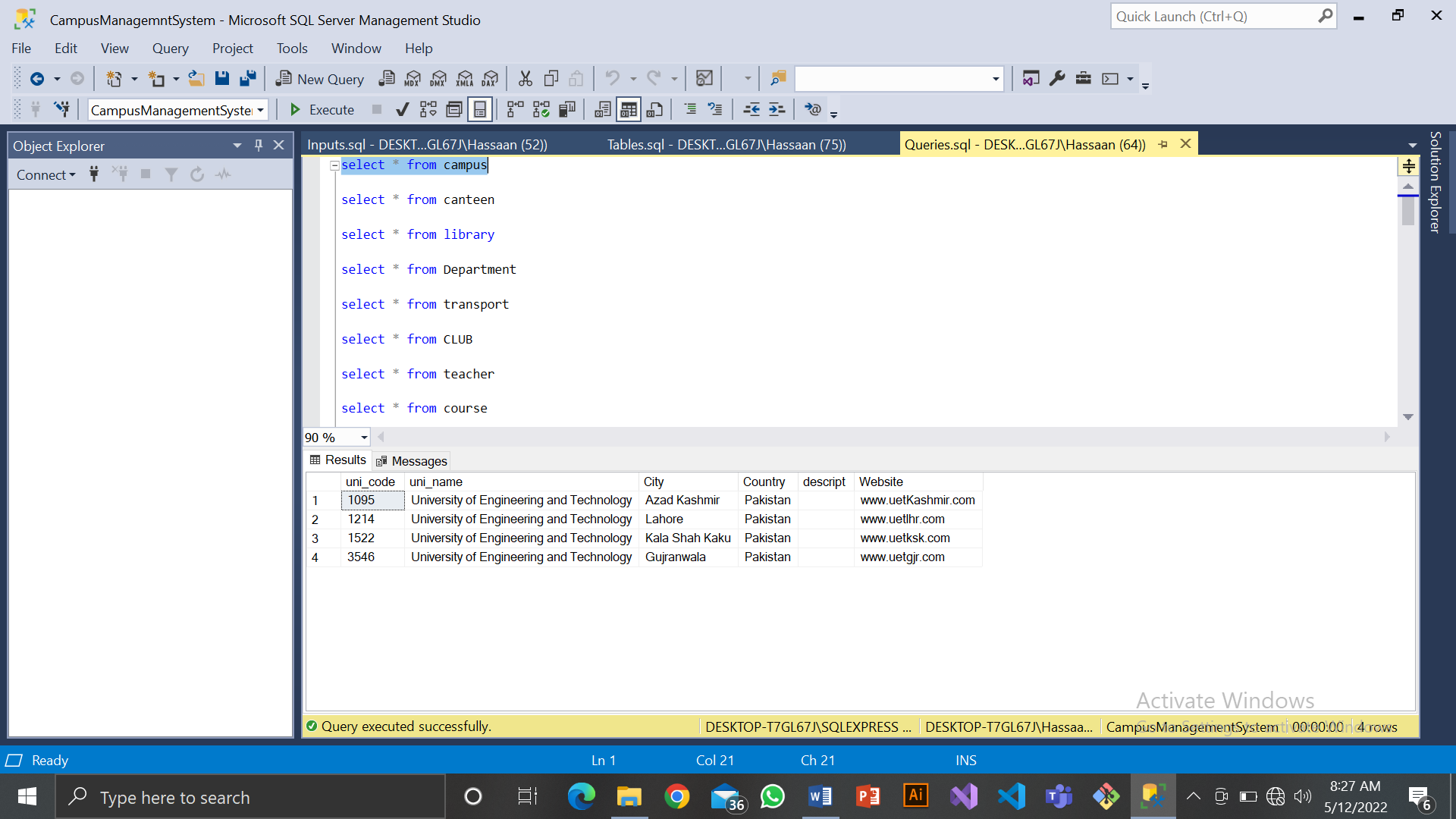


**SELECT COMMANDS**

**Select Command For Campus:**

select \* from campus

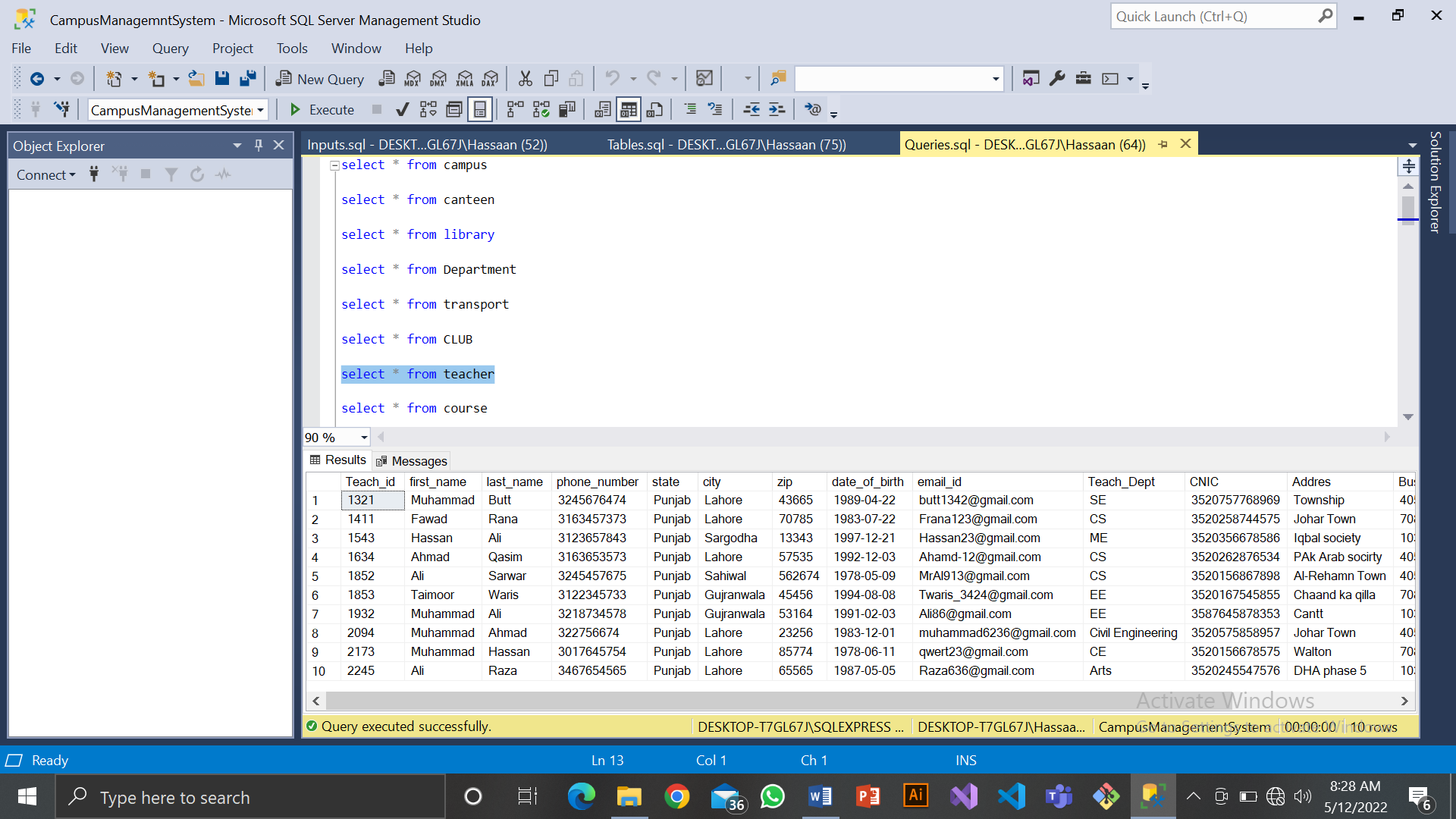
**OUTPUT SCREENSHOT**

****

**Select Command For Teacher:**

select \* from teacher

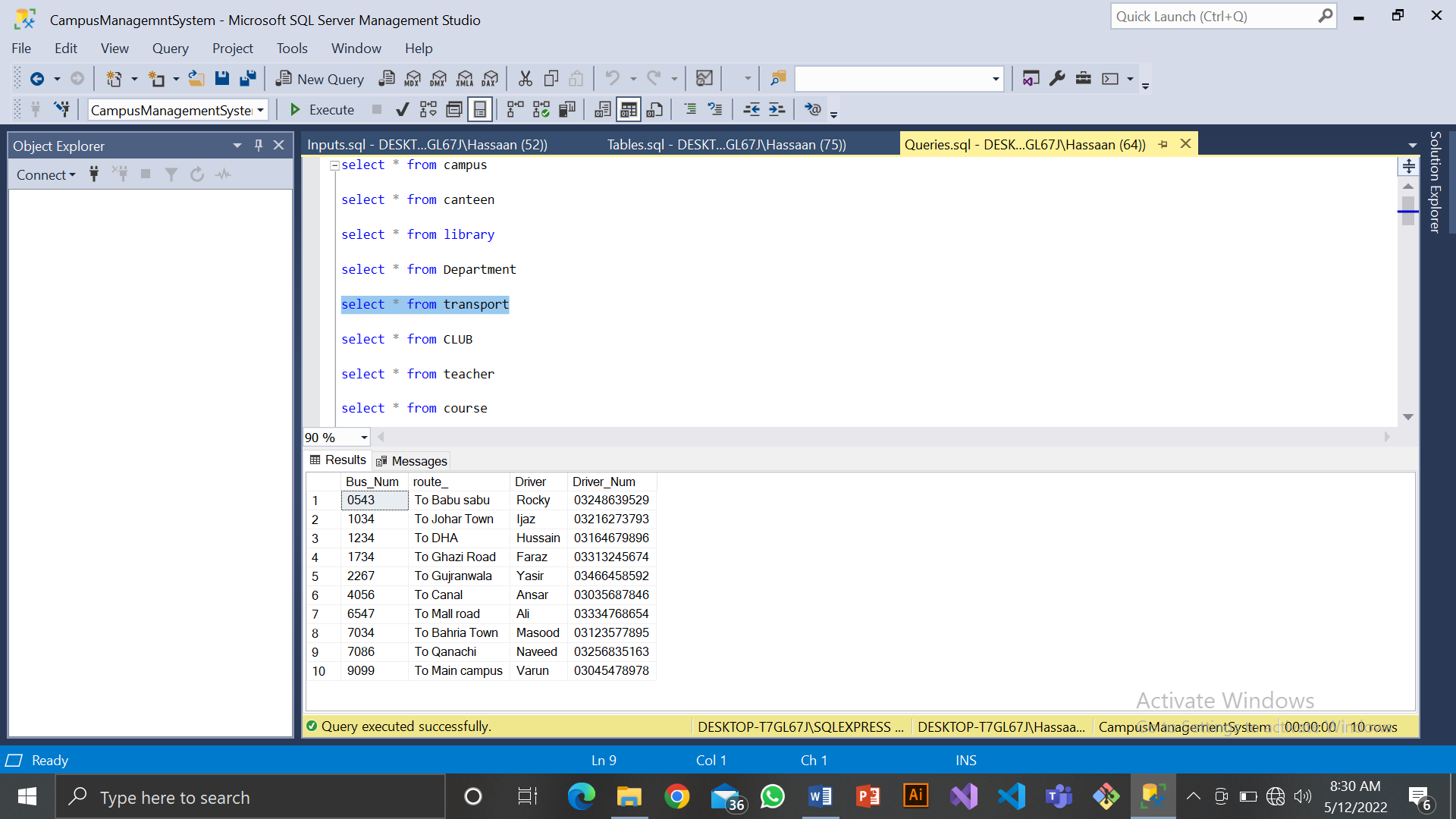
**OUTPUT SCREENSHOT**



**Select Command For Transport:**

select \* from transport

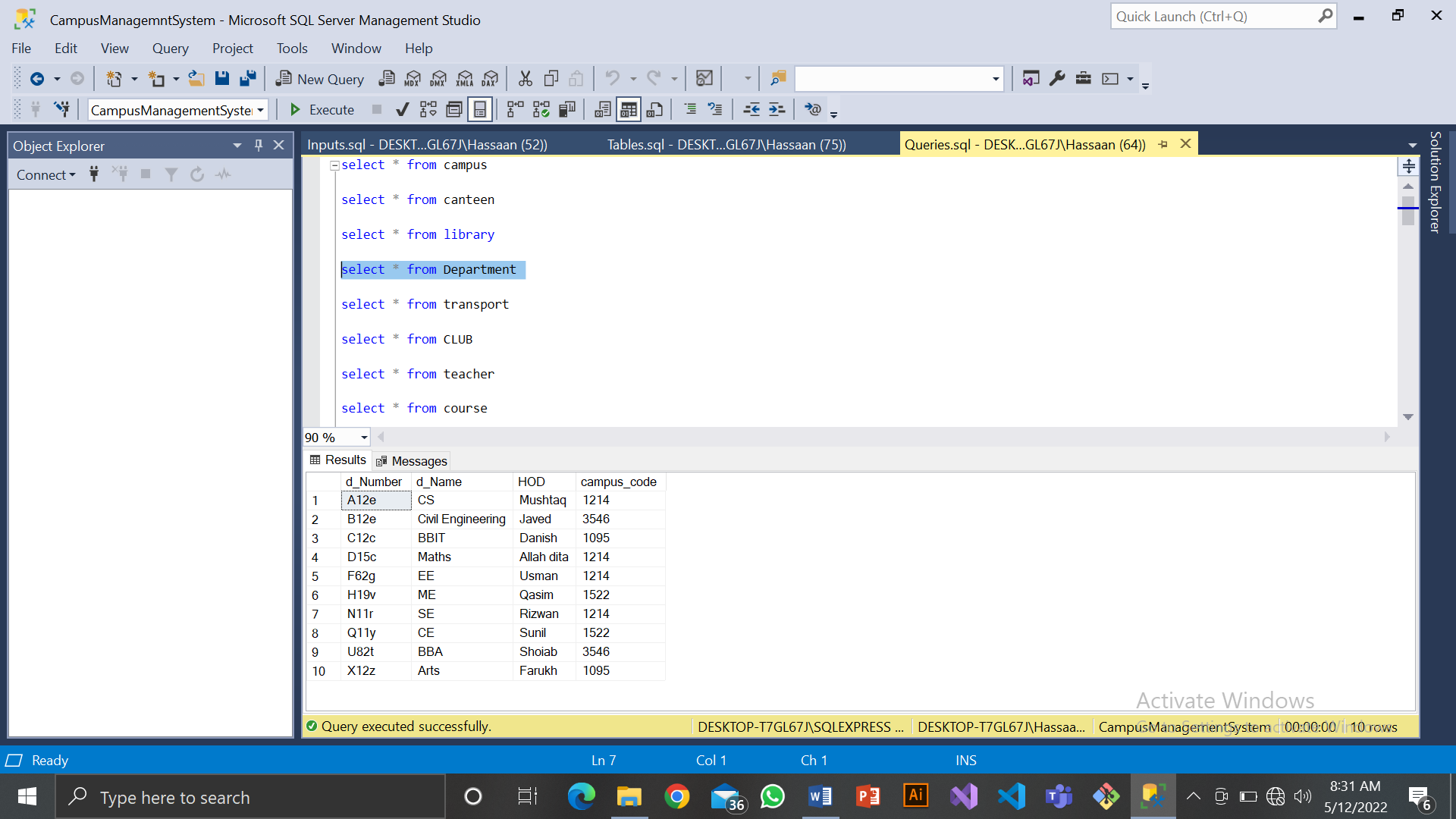
**OUTPUT SCREENSHOT**



**Select Command For Department:**

select \* from Department

**OUTPUT SCREENSHOT**



JOIN CONDITIONS

**INNER JOIN**

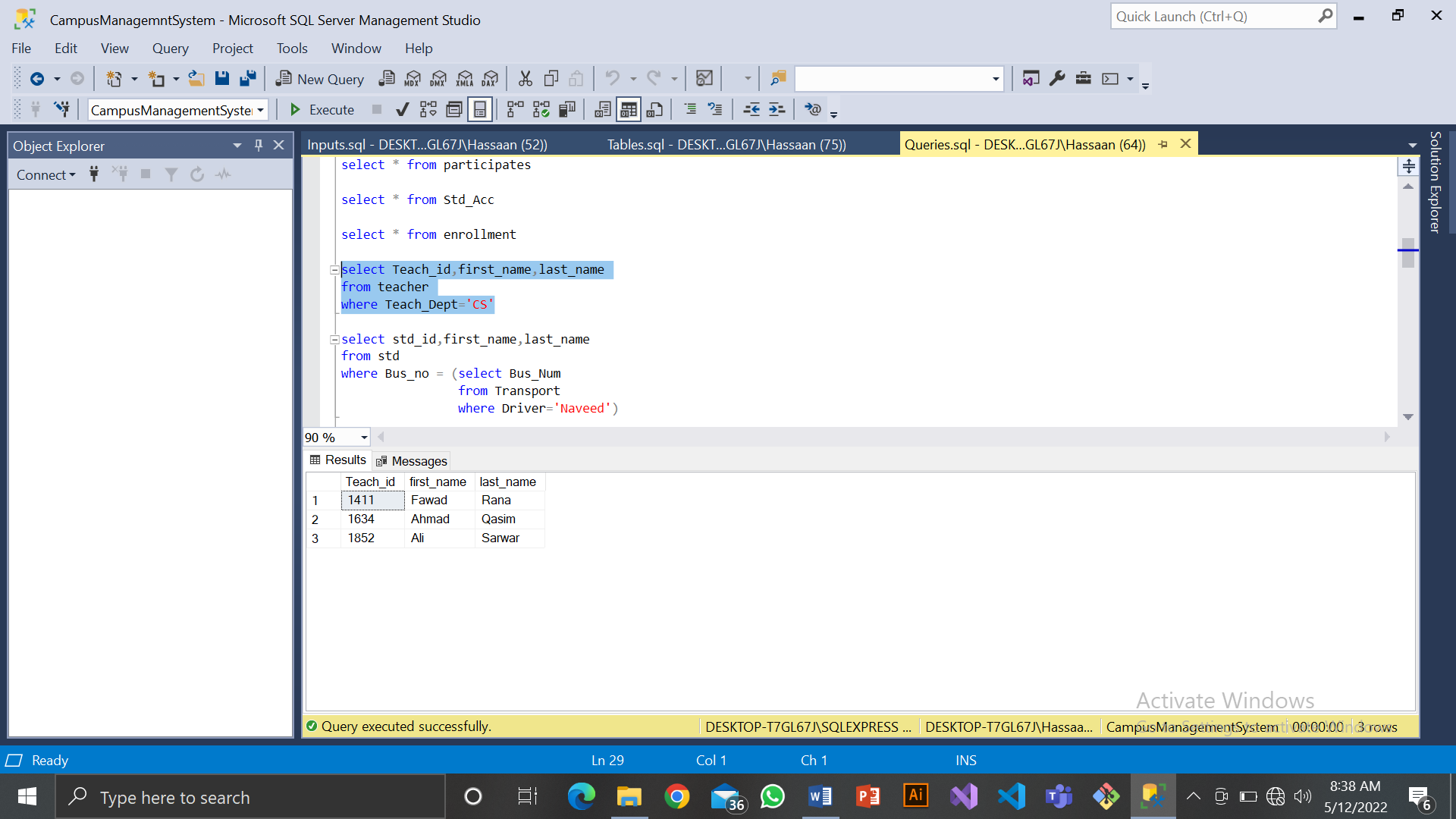
SELECT Teach\_id,first\_name,last\_name

FROM teacher AS T

INNER JOIN Department AS D

ON T.d\_Number = D.d\_Number

**OUTPUT SCREENSHOT**



**LEFT JOIN**

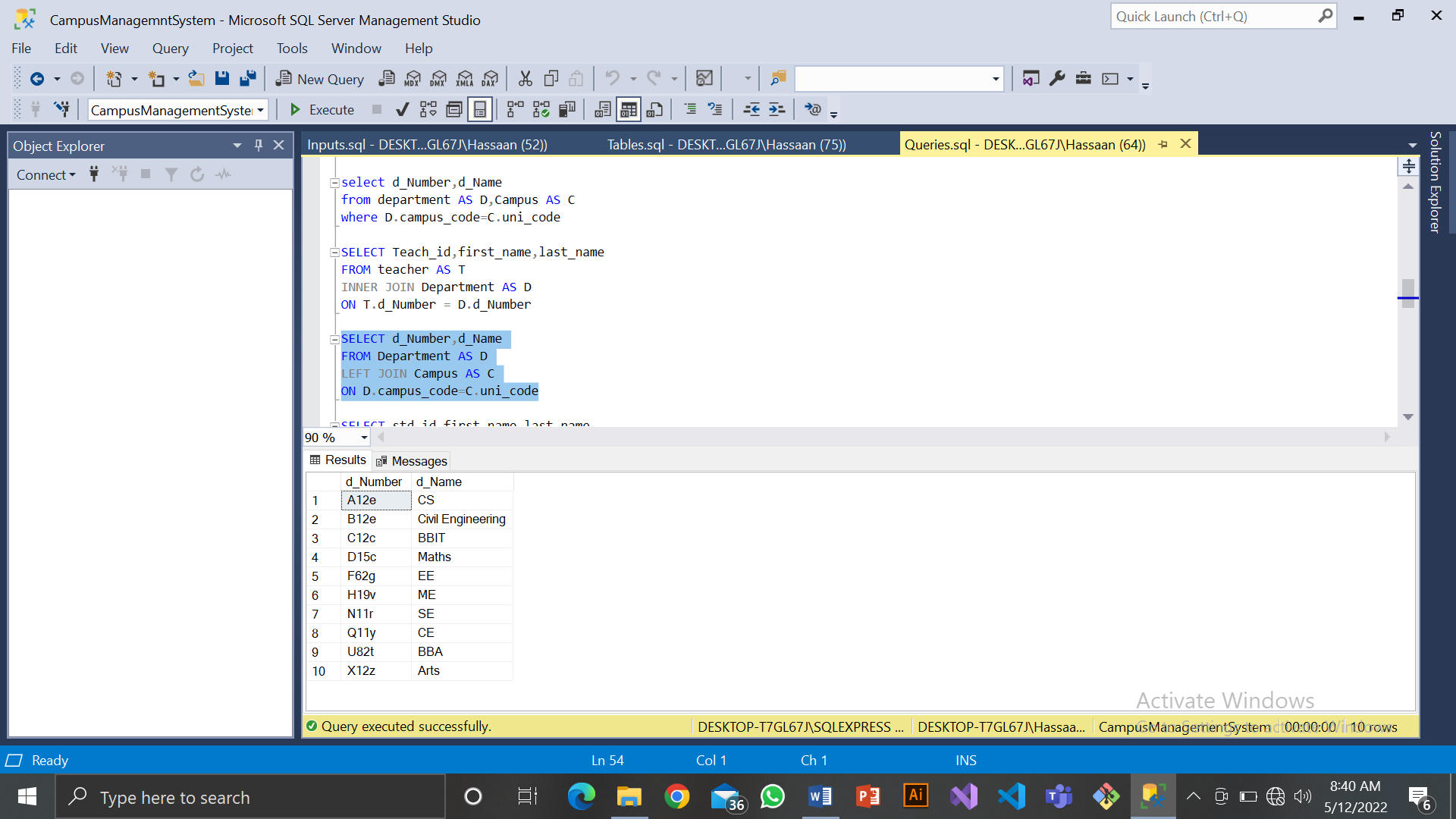
SELECT d\_Number,d\_Name

FROM Department AS D

LEFT JOIN Campus AS C

ON D.campus\_code=C.uni\_code

**OUTPUT SCREENSHOT**

****

**RIGHT JOIN**

SELECT std\_id,first\_name,last\_name

FROM std AS S

RIGHT JOIN Transport AS T

ON S.Bus\_No = T.Bus\_Num

**OUTPUT SCREENSHOT**

