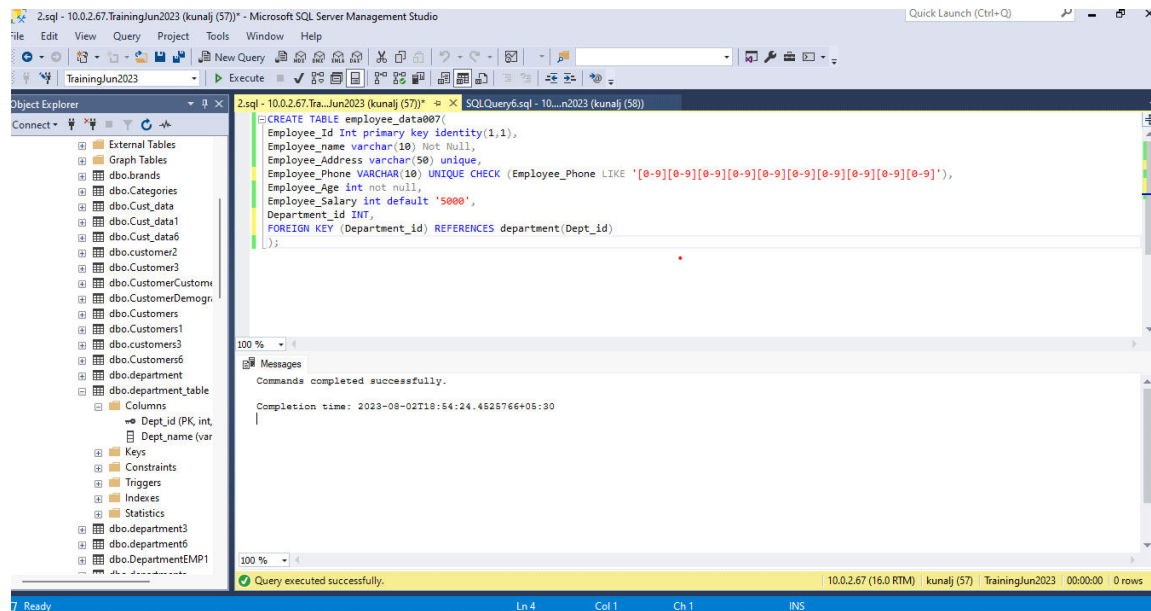


ASSIGNMENT -1

Create one table employee_data having below columns:

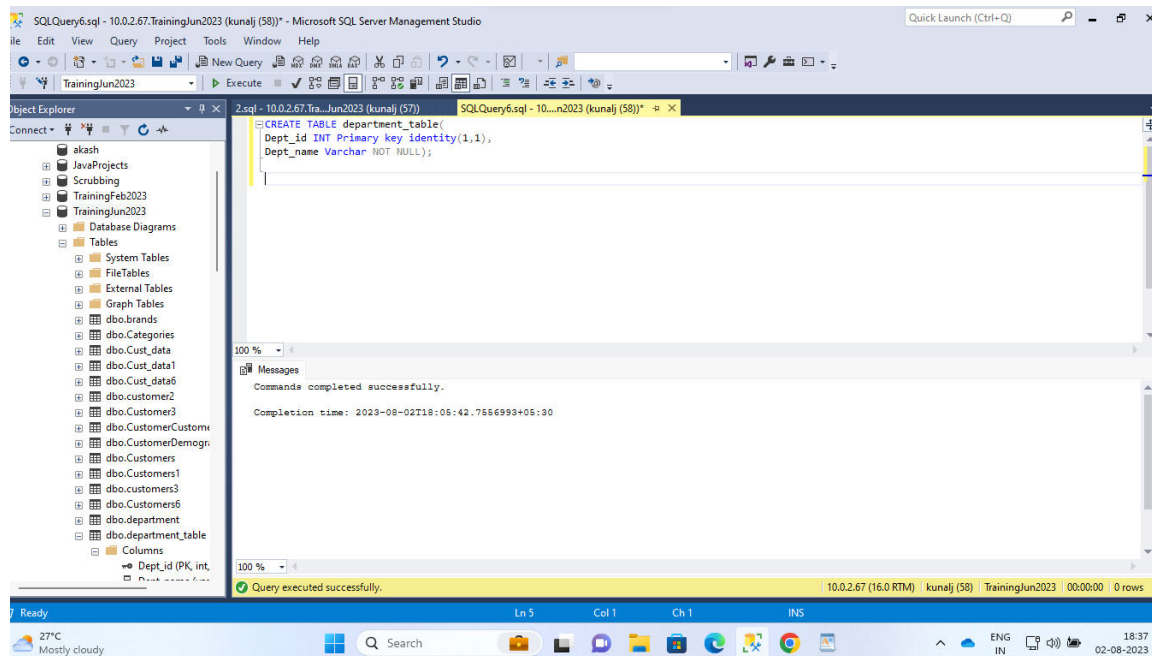
- Employee_Id – it has to be primary key and auto-generated.
- Employee_name – This field cannot contain null values and can store up to 10 characters. Size has to be 10.
- Employee_Address – Each address has to be unique.
- Employee_Phone – It has to be unique and only digits can be entered and that 10 digits has to be there.
- Employee_Age – Cannot be null and integer values can be passed.
- Employee_Salary – has to be default value as 5000.
- Department_id – Is a foreign key which references department table (dept_id).



2. Create a table Department having below columns

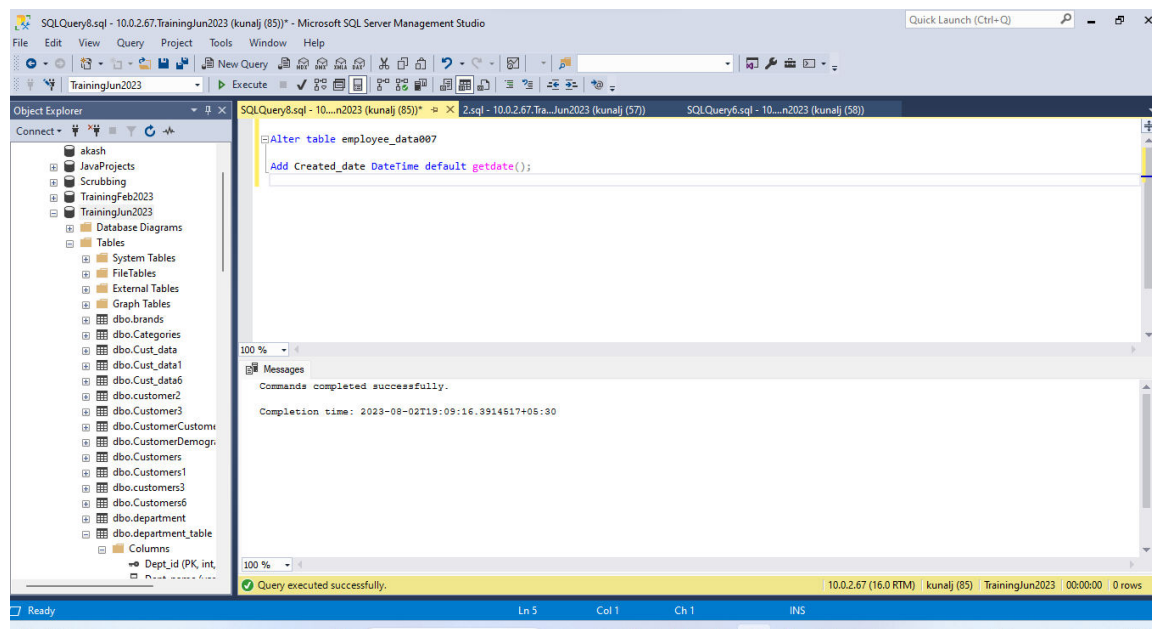
a. Dept_id – primary key,auto incremented

b. Dept_name – cannot be nul



3. Alter table employee_data to add one more column – Created_date which should have the datatype which can store date and time and

default value has to be getdate().



4. Insert the below data into employee_data.

a. Name- Meenakshi Sharma

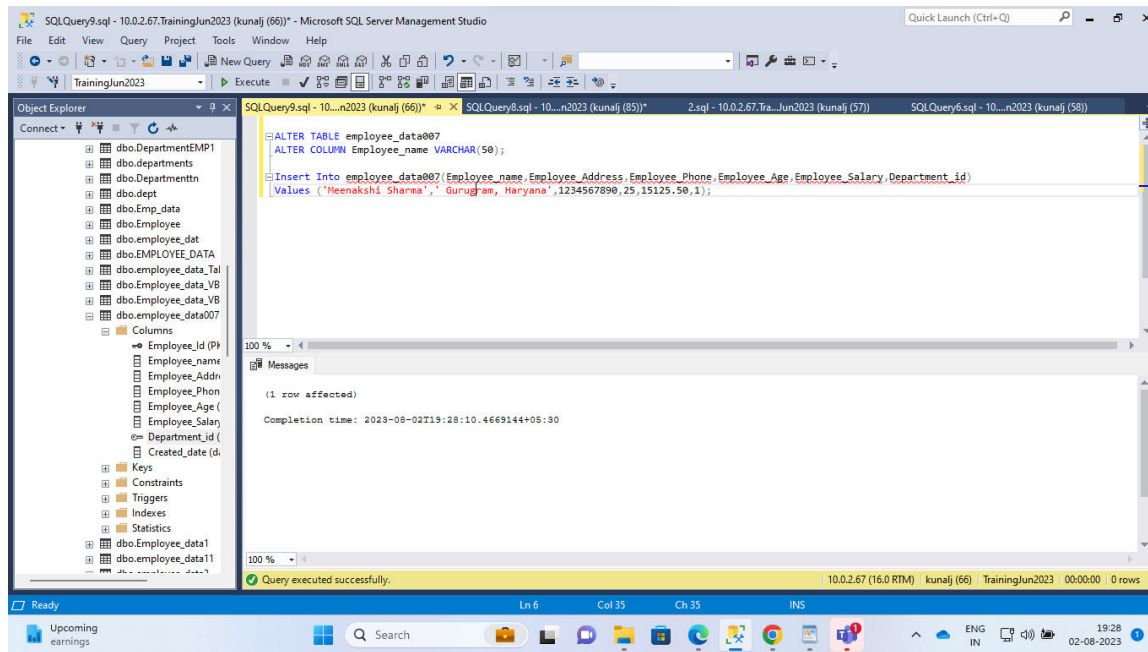
b. Address- Gurugram, Haryana

c. Phone – 1234567890

d. Age – 25

e. Salary – 15125.50

f. Dept_id – 1

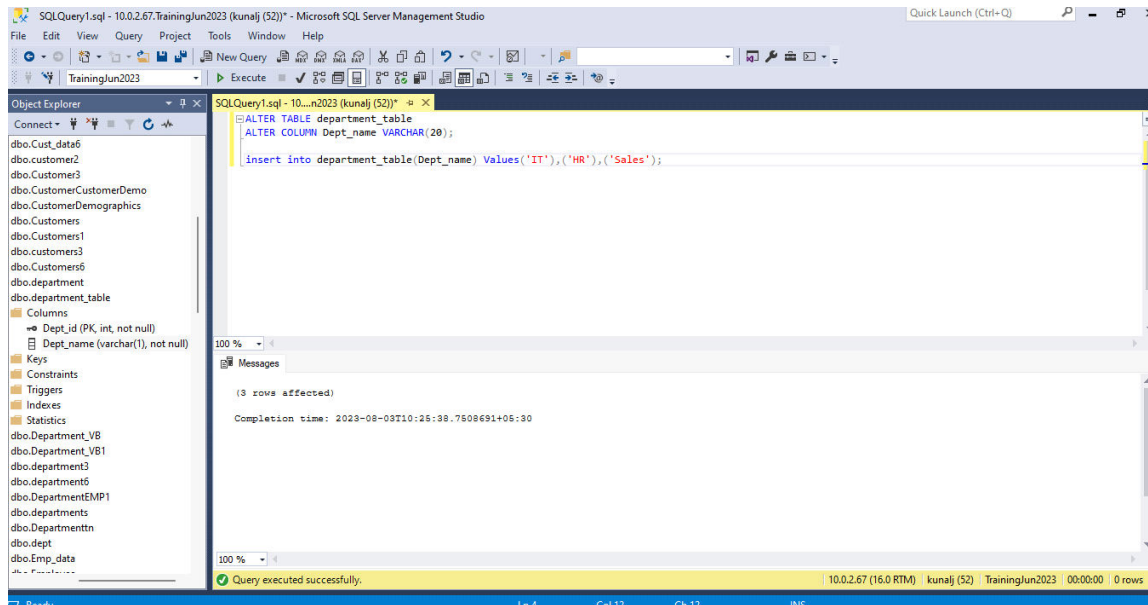


5. Insert the data into department table

a. 1st record – Dept_name – IT -- having dept_id as 1(auto generated)

b. 2nd record – Dept_name – HR -- having dept_id as 2(auto generated)

c. 3rd record -- Dept_name – Sales -- having dept_id as 3 (auto generated)



6. Modify the length of employee_name column from 10 to 50.

7. Insert the below data into employee_Data table.

Employee_id	Employee_name	Employee_Address	Employee_Phone	Employee_Age	Employee_Salary	Department_Id
-------------	---------------	------------------	----------------	--------------	-----------------	---------------

1

Meenakshi

Sharma Gurugram, Haryana 1234567890 25 null 1

2 Hina Khan Salem, Himachal Pradesh 2345678910 30 2100 4

3 Shruti Verma Jaipur, Rajasthan 3456789120 26 4520 1

4 Neha Singh Vasant Kunj, New Delhi 9876543210 35 6532 3

5 Kumud kumari Bangalore, Karnataka 1234567890 31 4500 2

6 Shreya Ghosal Mumbai, Maharashtra 5263417898 30 6000 1

7 Akshay Kumar Munnar, Kerela 231045659 45 3800 2

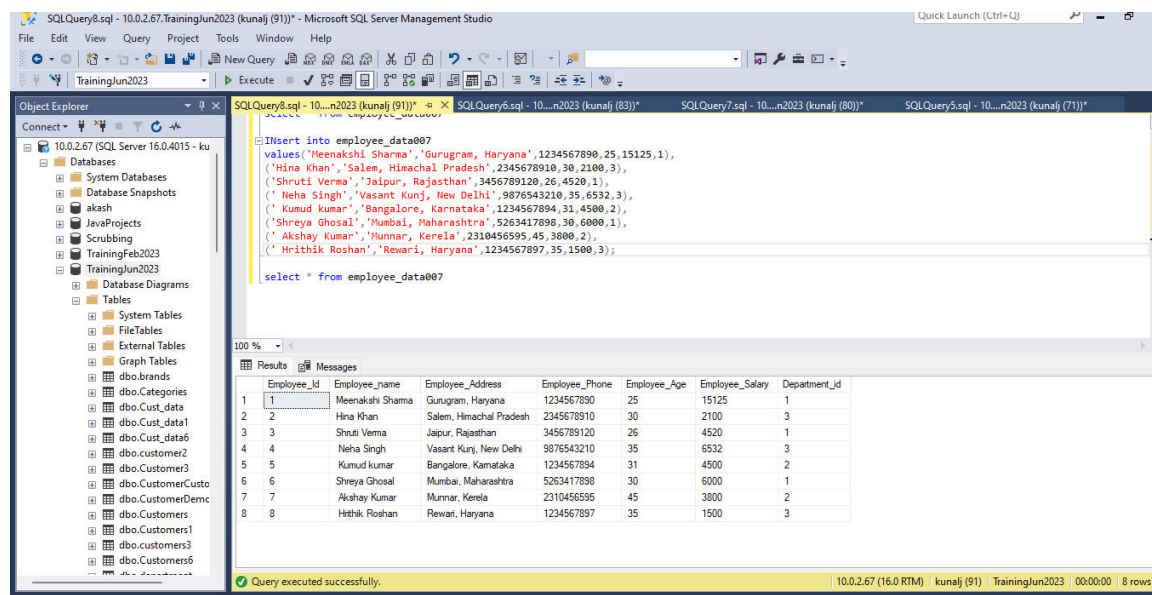
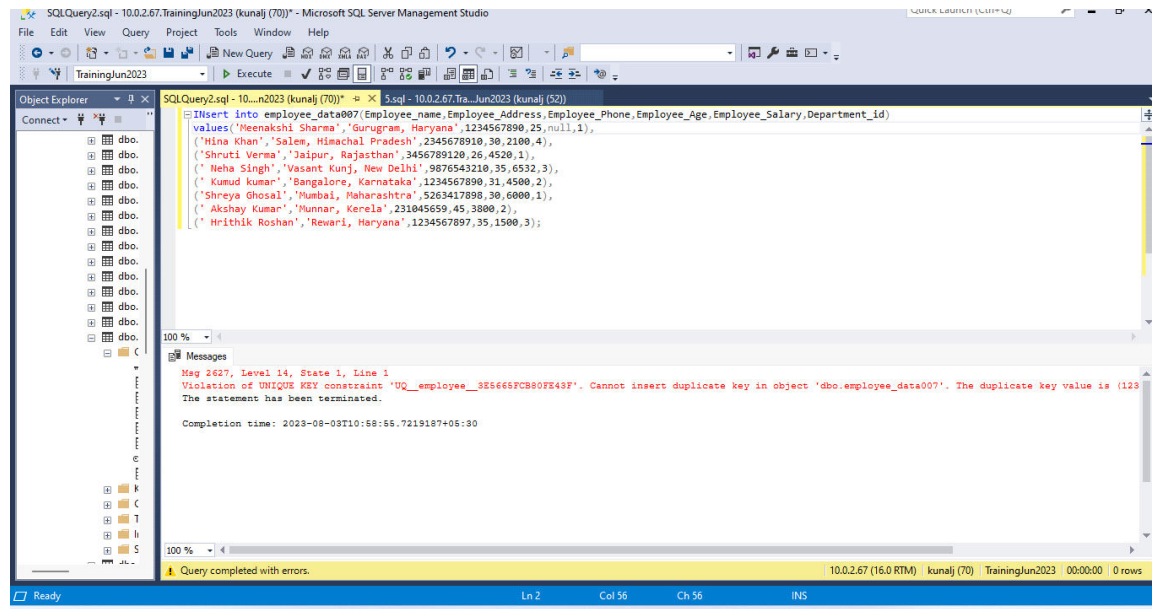
8 Hrithik Roshan Rewari, Haryana 1234567897 35 1500 3

In record 1, salary should be by default inserted as 5000.

In record 2, mention the error you receive and then assign the dept_id as 3 and insert it.

In record 5, mention the unique constraint error you get, and change the last digit by 4 and insert the record.

In record 7, mention the check constraint error you get and then add 5 in the last of the phone number and insert it.



8. Oops!! We inserted the incorrect name in employee_data where the name is 'kumud kumari'. Name has to be updated by 'Kumud

Kumar'.

SQLQuery9.sql - 10.0.2.67.TrainingJun2023 (kunalj (57)) - Microsoft SQL Server Management Studio

Object Explorer: 10.0.2.67 (SQL Server 16.0)

Query: `update employee_data007
SET Employee_name = 'Kumud Kumar'
WHERE Employee_Id = 1;`

Results: 8 rows

Employee_Id	Employee_name	Employee_Address	Employee_Phone	Employee_Age	Employee_Salary	Department_Id
1	Meenakshi Sharma	Gurgaon, Haryana	1234567890	25	15125	1
2	Hina Khan	Salem, Himachal Pradesh	2345678910	30	2100	3
3	Shruti Verma	Jaipur, Rajasthan	3456789120	26	4520	1
4	Neha Singh	Vasant Kunj, New Delhi	9876543210	35	6532	3
5	Kumud Kumar	Bangalore, Karnataka	1234567894	31	4500	2
6	Shreya Ghosal	Mumbai, Maharashtra	5263417898	30	6000	1
7	Akshay Kumar	Munnar, Kerala	2310456595	45	3800	2
8	Hrithik Roshan	Rewari, Haryana	1234567897	35	1500	3

Query executed successfully. 10.0.2.67 (16.0 RTM) kunalj (57) TrainingJun2023 00:00:00 8 rows

9. Insert one row in employee_data table with following values:

- Name- Aparna
- Address- Haryana
- Phone – 1234567890
- Age – 25
- Salary – 4300

SQLQuery10.sql - 10.0.2.67.TrainingJun2023 (kunalj (52)) - Microsoft SQL Server Management Studio

Object Explorer: 10.0.2.67 (SQL Server 16.0)

Query: `Insert into employee_data007 values ('Aparna', 'Haryana', 1234567890, 25, 4300)`

Messages: `Msg 213, Level 16, State 1, Line 1
Column name or number of supplied values does not match table definition.
Completion time: 2023-08-03T12:59:46.255718+05:30`

Query completed with errors. 10.0.2.67 (16.0 RTM) kunalj (52) TrainingJun2023 00:00:00 0 rows

10. Add one column in department table as 'Status' default value as active.
11. Insert one row in department table with the department name 'Human Resources'.
12. Delete the last inserted row from department table.
13. Drop column status from department table.
14. Get the total number of employees working in dept_id 1, 2 and 3.

```
ALTER TABLE department_table
ADD Status VARCHAR(10) DEFAULT 'active';

insert into department_table (Dept_name) values ('Human Resources');

delete from department_table
where Dept_id = (select MAX(Dept_id)
                from department_table);

alter table department_table drop constraint DF_department__Statu__6B64E1A4
alter table department_table drop column status;

SELECT Department_id, COUNT(*) AS Total_Employees
FROM employee_data007
WHERE Department_id IN (1, 2, 3)
GROUP BY Department_id;
```

Department_id	Total_Employees
1	3
2	2
3	3

15. Get the number of employees working in dept_id 1, 2 and 3 having salary greater than and equal to 4500.
16. Show the name of employee, salary and department for department 'Sales' . (Use the joins)
17. Insert one new department in department table as 'Accounting and Finance'.
18. Get the name and address of all employees and the department they are working. (use left join)


```

select * from employee_data007

select Department_id, count(*) as Total_Employees
from employee_data007
where Department_id in (1,2,3) and Employee_Salary >= 4500
group by department_id;

select e.Employee_name, e.Employee_Salary, d.Dept_name
from employee_data007 e
INNER JOIN department_table d ON e.Department_id = d.dept_id
where d.dept_name = 'Sales';

Insert into department_table (Dept_name) values('Accounting and Finance');

SELECT e.Employee_name, e.Employee_Address, d.dept_name
FROM employee_data007 e
LEFT JOIN department d ON e.Department_id = d.dept_id;

```

19. Get the dept_id, dept_name along with Employee_name of all departments using joins.
20. Get the name, address, age, salary and department of the employees which are assigned to some department. Do not include the employee which are not having any department.
21. Get the Employee_name with first name only from the employee_data table. (Hint - Use String Function)
22. To get the today's date and time we use the in-built function getdate()

For example – select getdate () --- 2017-12-19 07:09:03.830

Now using the same function can you provide the select query to get the

 - Current month in number. (Select MONTH(getdate()))
 - Current month name. (Select datename (month, getdate()))
 - Add two days to the current date. (select dateadd (day,2,getdate()))
 - Subtract two days from the current date. (Select dateadd (day,-2,getdate()))
 - Difference between two dates in months. (select datediff (MONTH,'10-10-2015',getdate()))
23. Update the column dept_name in department table using CASE statement.

For Example – when dept_name is IT, update it to 'Information Technology',

When dept_name is HR, update it to Human Resources'.


```
SELECT d.Dept_id, d.Dept_name, e.Employee_name
FROM department d
LEFT JOIN employee_data007 e ON d.dept_id = e.Department_id;

Select e.Employee_name,e.Employee_Address,e.Employee_Age,e.Employee_Salary,d.Dept_name
from employee_data007 e
Left Join department_table d ON e.Department_id=d.Dept_id;

SELECT Employee_name,
SUBSTRING(Employee_name,1,CHARINDEX(' ',Employee_name)-1) AS FIRST_NAME
FROM employee_data007;

SELECT MONTH(getdate()) AS CurrentMonthNumber,
DATENAME(MONTH, getdate()) AS CurrentMonthName,
DATEADD(DAY, 2, getdate()) AS TwoDaysLater,
DATEADD(DAY, -2, getdate()) AS TwoDaysAgo,
DATEDIFF(MONTH, '2015-10-10', getdate()) AS MonthsDifference;

UPDATE department_table
SET Dept_name =
CASE Dept_name
WHEN 'IT' THEN 'Information Technology'
WHEN 'HR' THEN 'Human Resources'
ELSE Dept_name
END;
```