

1. What is the difference between SELECT INTO and INSERT SELECT?
2. Write a query that will create a new table named employeesCopy that will have the exact same structure of the employees table and also contains all the data that is found in it.
3. Write a query that will return all the data that is stored in the newly created table employeesCopy.

	employee_id	first_name	last_name	email	phone_number	hire_date
1	100	Steven	King	SKING	515.123.4567	1987-06-17 00:00:00.000
2	101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-09-21 00:00:00.000
3	102	Lex	De Haan	LDEHAAN	515.123.4569	1993-01-13 00:00:00.000
4	103	Alexander	Hunold	AHUNOLD	590.423.4567	1990-01-03 00:00:00.000
5	104	Bruce	Ernst	BERNST	590.423.4568	1991-05-21 00:00:00.000

....

107 rows returned

4. Write a query that will add the below employee details in the table created in question 2. You are to make sure to include the target columns in the statement.

Column Name	Value
Employee Number	207
Name	Maria
Surname	Caruana
Email	MARCARU
Telephone	515.123.8989
Date employed	13th October 2015
Job	SA_REP
Salary	8500
Commission	0.05
Manager number	149
Department number	80

5. Write a query that will add another employee in the employeeCopy table with the following details. You are to include the target columns in the statement and leave out all the remaining columns in the table (do not even specify them in the target columns)

Column Name	Value
Employee Number	208
Surname	Mallia
Email	MALLIA
Date employed	19th June 2014
Job	SA_MAN

6. You are to write a query that displays all the details of the two queries that were executed in questions 4 and 5.

	employee_id	first_name	last_name	email	phone_number	hire_date
1	207	Maria	Caruana	MARCARU	515.123.8989	2015-10-13 00:00:00.000
2	208	NULL	Mallia	MALLIA	NULL	2014-06-19 00:00:00.000

	job_id	salary	commission_pct	manager_id	department_id
	SA_REP	8500.00	0.05	149	80
	SA_MAN	NULL	NULL	NULL	NULL

2 rows returned

7. Re-write the statement in question 6 such that this time you explicitly include a value for each column. If the details for the column are not included you are to include the SQL keyword for non-available values.
8. Answer the following questions:

- a. Does this query execute successfully. If not why and how to fix it? If yes what happened and are there any problems?

```
INSERT INTO employeesCopy
VALUES (209, 'Mallia', 'MALLIA', NULL, '20140619', 'SA_MAN', NULL, NULL,
      NULL, NULL);
```

- b. Does this query execute successfully. If not why and how to fix it? If yes what happened and are there any problems?

```
INSERT INTO employeesCopy
VALUES (210, 'Anthea', 'Borg', 'ANTHBOR', NULL, '20140619', 'SA_MAN',
       'NULL', NULL, NULL, NULL);
```

- c. Does this query execute successfully. If not why and how to fix it? If yes what happened and are there any problems?

```
INSERT INTO employeesCopy
VALUES (211, 'Buttigieg', 'Mario', 'MARATD', NULL, '20140619', 'SA_MAN',
       NULL, NULL, NULL, NULL);
```

- d. Why is it recommended to specify the target attributes while using the INSERT statement?
9. You write 3 SQL statement that will add all the employees listed in the table below in the employeesCopy table. Make sure that all the values are added correctly.

Column Name	Employee 1	Employee 2	Employee 3
Employee Number	212	213	214
Name	Alan	Alison	Katrina
Surname	Brincat	Vella	Sammur
Email	ALABRI	ALIVEL	SAMKAT
Telephone	515.234.2626	Unknown value	515.234.8978
Date employed	13th October 2015	12 th October 2014	1 st April 2012
Job	SA_REP	SA_MAN	SA_REP
Salary	8500	Unknown value	9500
Commission	0.05	Unknown value	Unknown value
Manager number	Unknown value	149	149
Department number	80	80	Unknown value

10. In this question you are to write a single query that will perform the same operation that was performed in question 9. The most important thing is that a single statement is executed.
11. In the employeesCopy entity, why is it possible to include two different employee which have the same employee_id?

12. In this question firstly asked to execute the below code and then write a statement that will fill in the new Department companies with the departments which are situated in locations 1400, 1500, 1600 and 1700 of the original Departments table.

```
CREATE TABLE dbo.departmentsUS
(
    [Department Number] NUMERIC (4,0) PRIMARY KEY,
    [Department Name] VARCHAR(30) NOT NULL,
    [Location Id] NUMERIC(4,0)
);
```

13. Write a query that will verify that all the rows in the departmentsUS table have been successfully copied.

	Department Number	Department Name	Location Id
1	10	Administration	1700
2	30	Purchasing	1700
3	50	Shipping	1500
4	60	IT	1400
5	90	Executive	1700
6	100	Finance	1700

23 rows returned

14. Write a query that verifies if the departmentsUS table contains a department named IT. If this department exists, you are to change its name to ICT
15. Write a query that will modify departments in location number 1400 to location 1500
16. Write a query that will change the department number of all the employees in the employeesCopy entity which are currently working in department 60. Since this department is going to close you are to set their department number to an unknown value. 5 rows should be effected
17. Write a query that will change the job_id and salary of employee 101 in the employeesCopy table, such that these values are equal to those of her manager.
18. Write a query that will change the date employed of all the employees in the employeesCopy entity, such that the value will be that of the current date and time. Ideally you are to use an SQL function and not hard-code the date and time

19. Write a query that will change the location number of the ICT department in the departmentsUS table, such that its value is equivalent to that of the department whose manager is employee 200 (Note: the departmentsUS does not have the managerid column)
20. Write a query that will remove all the rows that are found in the departmentsUS table
21. Give an alternative SQL statement to question 20.
22. Write a query that will remove all the employees in the employeesCOPY table which are not assigned to a department
23. Write a query that will remove all the rows in employeesCopy who have a salary which is equal to that of employee 131
24. Remove the tables employeesCopy and departmentsUS from the database.