1. Write a query that will create a table names jobs2 that will have the exact same structure as the jobs table. All the data found in the jobs table should be copied to the jobs2 table.

   Once that the table has been created and filled successfully you are to execute the below statement:

```
ALTER TABLE dbo.jobs2
ADD CONSTRAINT jobs2_pk PRIMARY KEY(job_id);
```

   Why is this statement required? What effects will it have on the jobs2 table?

2. The company is willing to add a number of new roles to its database before implementing them in the real system. For this reason testing is to be carried out beforehand and the following data is to be inserted into the jobs2 table

Job_id	Job_title	Min_salary	Max_salary
HR_CLERK	Human Resources Clerk	2500	5000
HR_MGR	Human Resources Manager	9500	15000
HR_ASST	Human Resources Assistant	3000	6000
HR_ASSTMGR	Human Resources Assistant Manager	6000	12500

   The first job should be included in a separate statement while the remaining 3 jobs should be executed together in another separate single statement.

3. In this question you are to execute the below code so that the employees2 table is created.

```
CREATE TABLE employees2
(
  employee_id  NUMERIC(6) CONSTRAINT emp2_emp_id_pk PRIMARY KEY,
  first_name VARCHAR(20),
  last_name  VARCHAR(25) CONSTRAINT emp2_last_name_nn  NOT NULL,
  email  VARCHAR(25) CONSTRAINT emp2_email_nn  NOT NULL
                     CONSTRAINT emp2_email_uk UNIQUE,
  phone_number   VARCHAR(20),
  hire_date DATETIME CONSTRAINT emp2_hire_DATETIME_nn  NOT NULL,
  job_id   VARCHAR(10) CONSTRAINT emp2_job_nn  NOT NULL,
  salary   NUMERIC(8,2) CONSTRAINT emp2_salary_min CHECK (salary > 0),
  commission_pct NUMERIC(2,2),
```

```
  manager_id NUMERIC(6),
  department_id  NUMERIC(4),
  CONSTRAINT emp2_dept_fk FOREIGN KEY (department_id) REFERENCES
     departments(department_id),
  CONSTRAINT emp2_job_fk FOREIGN KEY (job_id) REFERENCES jobs2(job_id),
  CONSTRAINT emp2_manager_fk FOREIGN KEY (manager_id) REFERENCES
     employees(employee_id),
) ;
```

The table created with the above code has the same structure of the original employees table. You are to include the code that will copy the data found in the employees table to the employees2 table.

4. You are to add the below employees to the employees2 table. It is important that the target columns are included in the statement.

Column Name	**Employee 1**	**Employee 2**
Employee Number	300	301
Name	Marika	Rose
Surname	Zarb	Zarb
Email	MARZAR	RZAR
Telephone	515.211.2121	Unknown value
Date employed	13th December 2013	15th August 2011
Job	HR_MGR	HR_CLERK
Salary	9500	Unknown value
Commission	Unknown value	Unknown value
Manager number	Unknown value	149
Department number	40	40

5. You are to execute the below query and explain what happens and the reasoning behind this in detail.

```
INSERT INTO employees2
VALUES(198, 'Davide', 'Zgarbi', 'ZGARDA', NULL, '20001111', 'HR_CLERK',
       NULL, NULL, 149, 40);
```

6. Once again you are to execute the below query and comment on what happens once that this statement is executed.

```
INSERT INTO employees2
VALUES(302, 'Davide', 'Zgarbi', 'ZGARDA', NULL, '20001111', 'HR_SEC',
       NULL, NULL, 149, 40);
```

7. You are to suggest possible changes that will all the statements in questions 5 and 6 to be executed successfully.

8. You are to include a statement that will change the minimum and maximum salary of the 'Human Resources Manager' in jobs2 entity to 10000 and 16000 respectively.

9. You are to verify that all the employees in the employees2 table which work in the HR department have a salary which is within range of their job limit (min_salary and max_salary). If the salary is unknown/less than the minimum salary then set it to the minimum salary of the job and if it is higher than the maximum salary of that job it should become equal to the maximum job. Your final result should look like this:

	employee_id	last_name	first_name	salary	job_id
1	203	Mavris	Susan	6500.00	HR_REP
2	300	Zarb	Marika	10000.00	HR_MGR
3	301	Zarb	Rose	2500.00	HR_CLERK

10. You are to execute the below query and explain what happens and the reasoning behind this in detail.

```
DELETE FROM jobs2
WHERE job_id = 'HR_MGR';
```

11. You are to determine which HR jobs are not being utilized in the employees2 table and remove them from the jobs2 table.

12. Remove the jobs2 and employees2 table. Explain what was important for this to be successful.