Assignment #3:
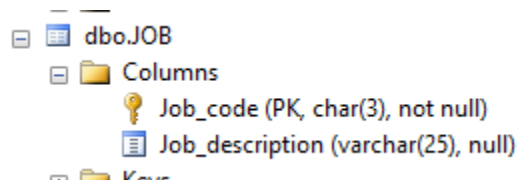**Student Name: The Cuong, Bui**
Student ID: C0770339
Date: Nov 4, 2019

1. Write SQL code that will create the table structure for a table named EMP_1.
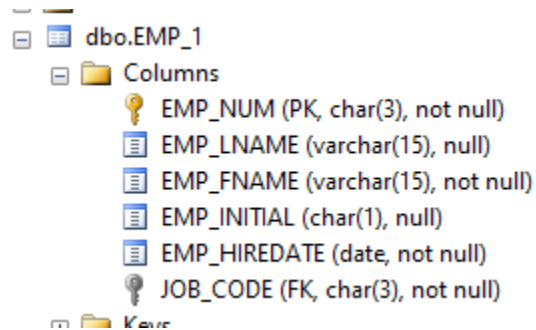   Remember that the JOB_CODE is the foreign key to JOB table.

Attribute	Data
EMP_NUM	CHAR (3), PRIMARY KEY
EMP_LNAME	VARCAHR(15)
EMP_FNAME	VARCAHR(15)
EMP_INITIAL	CHAR (1)
EMP_HIREDATE	DATE
JOB_CODE	CHAR(3)

```sql
Create Database EMPLOYEE;


create table JOB(
Job_code Char(3) not null primary key,
Job_description varchar(25));
```



```
dbo.JOB
  Columns
    Job_code (PK, char(3), not null)
    Job_description (varchar(25), null)
  Keys
```

```sql
Create table EMP_1(
EMP_NUM CHAR(3) not null,
EMP_LNAME VARCHAR(15),
EMP_FNAME VARCHAR(15) not null,
EMP_INITIAL char(1),
EMP_HIREDATE Date not null,
JOB_CODE char(3) not null,
primary key(EMP_NUM),
foreign key (Job_CODE)
    references JOB(Job_code));
```

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☐ ☐ dbo.EMP_1
  ☐ ☐ Columns
    🔑 EMP_NUM (PK, char(3), not null)
    ☰ EMP_LNAME (varchar(15), null)
    ☰ EMP_FNAME (varchar(15), not null)
    ☰ EMP_INITIAL (char(1), null)
    ☰ EMP_HIREDATE (date, not null)
    🔑 JOB_CODE (FK, char(3), not null)
  ☐ ☐ Keys

2. Write a SQL codes to populate the EMP_1 as below:

```
insert into JOB VALUES ('200', 'HUMAN RESOURCE');
insert into JOB VALUES ('500', 'IT ENGINEERING');
insert into JOB VALUES ('501', 'SOFT DEVELOPER ENGINEERING');
insert into JOB VALUES ('502', 'SOFT TESTER ENGINEERING');
insert into JOB VALUES ('503', 'PROJECT MANAGER');
insert into JOB VALUES ('504', 'PROJECT MANAGER');
insert into JOB VALUES ('505', 'DIRECTOR');
insert into JOB VALUES ('506', 'ADMIN');

SELEct * from JOB;
```

	Job_code	Job_description
1	200	HUMAN RESOURCE
2	500	IT ENGINEERING
3	502	SOFT TESTER ENGINEERING
4	503	PROJECT MANAGER
5	504	PROJECT MANAGER
6	505	DIRECTOR
7	506	ADMIN

```
insert into EMP_1 VALUES (101, 'NEWS', 'JOHN', 'G', '02-01-2011', '502');
insert into EMP_1 VALUES (102, 'SENIOR', 'DAVID', 'H', '01-09-2014', '500');
insert into EMP_1 VALUES (103, 'JOHNSON', 'ALICE', 'J', '07-06-2013', '500');
insert into EMP_1 VALUES (104, 'ALONZO', 'MARIA', 'L', '09-02-2016', '200');
insert into EMP_1 VALUES (105, 'RADILFO', 'RALK', 'Y', '05-05-2015', '506');

select * from EMP_1;
```

	EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE
1	101	NEWS	JOHN	G	2011-02-01	502
2	102	SENIOR	DAVID	H	2014-01-09	500
3	103	JOHNSON	ALICE	J	2013-07-06	500
4	104	ALONZO	MARIA	L	2016-09-02	200
5	105	RADILFO	RALK	Y	2015-05-05	506

3. Write the SQL code that changes the job code 500 for the employee number 103.

```
-- Alter EMP_1 DB
alter table EMP_1 nocheck constraint FK__EMP_1__JOB_CODE__1273C1CD
update EMP_1  SET EMP_1.JOB_CODE = '501' where EMP_NUM= '103';
```

	EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE
1	101	NEWS	JOHN	G	2011-02-01	502
2	102	SENIOR	DAVID	H	2014-01-09	500
3	103	JOHNSON	ALICE	J	2013-07-06	501
4	104	ALONZO	MARIA	L	2016-09-02	200
5	105	RADILFO	RALK	Y	2015-05-05	506

 4. Write a SQL code to delete a row with person with the name Ralk Radolfo with hire date 05-05-2015.

```
delete from EMP_1 where (EMP_FNAME = 'RALK' and EMP_LNAME = 'RADILFO' and EMP_HIREDATE = '05-05-2015');
```

	EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE
1	101	NEWS	JOHN	G	2011-02-01	502
2	102	SENIOR	DAVID	H	2014-01-09	500
3	103	JOHNSON	ALICE	J	2013-07-06	501
4	104	ALONZO	MARIA	L	2016-09-02	200

5. Write a SQL code that will find the count of the employees hired after 01-02-2011.

```
select count(*) as 'count of the employees hired after 01-02-2011' from EMP_1
where EMP_HIREDATE > '01-02-2011';
```

Results | Messages

	count of the employees hired after 01-02-2011
1	4

6. Write a SQL code that print the name of all the employees ordered by last name first and then their employee number having job codes > 200.

```
select EMP_LNAME, EMP_FNAME from EMP_1  where JOB_CODE > 200 order by EMP_FNAME;
```

7. Write a SQL code that updates employee EMP_FNAME to Sara with EMP_NUM 101.

```
update EMP_1  SET EMP_FNAME = 'Sara' where EMP_NUM= '101';
```

Results | Messages

	EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE
1	101	NEWS	Sara	G	2011-02-01	502
2	102	SENIOR	DAVID	H	2014-01-09	500
3	103	JOHNSON	ALICE	J	2013-07-06	501
4	104	ALONZO	MARIA	L	2016-09-02	200