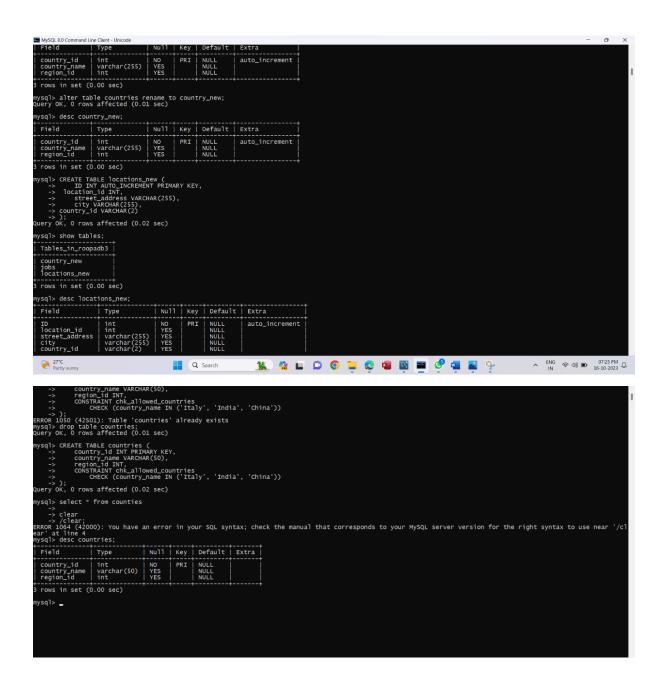1. Write a SQL statement to create a simple table countries including columns country_id,country_name and region_id.
2. Write a SQL statement to create a table named jobs including columns job_id, job_title, min_salary, max_salary and check whether the max_salary amount exceeding the upper limit 25000.

```
mysql> CREATE TABLE jobs (
    ->     job_id INT PRIMARY KEY,
    ->     job_title VARCHAR(50),
    ->     min_salary DECIMAL(10, 2),
    ->   max_salary DECIMAL(10, 2) CHECK (max_salary <= 25000)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc jobs;
+------------+---------------+------+-----+---------+-------+
| Field      | Type          | Null | Key | Default | Extra |
+------------+---------------+------+-----+---------+-------+
| job_id     | int           | NO   | PRI | NULL    |       |
| job_title  | varchar(50)   | YES  |     | NULL    |       |
| min_salary | decimal(10,2) | YES  |     | NULL    |       |
| max_salary | decimal(10,2) | YES  |     | NULL    |       |
+------------+---------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

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```
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> alter table countries rename to country_new;
Query OK, 0 rows affected (0.01 sec)

mysql> desc country_new;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> CREATE TABLE locations_new (
    ->     ID INT AUTO_INCREMENT PRIMARY KEY,
    ->   location_id INT,
    ->     street_address VARCHAR(255),
    ->     city VARCHAR(255),
    -> country_id VARCHAR(2)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> show tables;
+-------------------+
| Tables_in_roopadb3 |
+-------------------+
| country_new       |
| jobs              |
| locations_new     |
+-------------------+
3 rows in set (0.00 sec)

mysql> desc locations_new;
+----------------+--------------+------+-----+---------+----------------+
| Field          | Type         | Null | Key | Default | Extra          |
+----------------+--------------+------+-----+---------+----------------+
| ID             | int          | NO   | PRI | NULL    | auto_increment |
| location_id    | int          | YES  |     | NULL    |                |
| street_address | varchar(255) | YES  |     | NULL    |                |
| city           | varchar(255) | YES  |     | NULL    |                |
| country_id     | varchar(2)   | YES  |     | NULL    |                |
+----------------+--------------+------+-----+---------+----------------+
```

27°C
Partly sunny
Q Search
ENG
IN
07:25 PM
16-10-2023

```
    ->     country_name VARCHAR(50),
    ->     region_id INT,
    ->     CONSTRAINT chk_allowed_countries
    ->         CHECK (country_name IN ('Italy', 'India', 'China'))
    -> );
ERROR 1050 (42S01): Table 'countries' already exists
mysql> drop table countries;
Query OK, 0 rows affected (0.01 sec)

mysql> CREATE TABLE countries (
    ->     country_id INT PRIMARY KEY,
    ->     country_name VARCHAR(50),
    ->     region_id INT,
    ->     CONSTRAINT chk_allowed_countries
    ->         CHECK (country_name IN ('Italy', 'India', 'China'))
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> select * from counties
    ->
    -> clear
    -> /clear;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '/cl
ear' at line 4
mysql> desc countries;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| country_id   | int         | NO   | PRI | NULL    |       |
| country_name | varchar(50) | YES  |     | NULL    |       |
| region_id    | int         | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql>
```

```
9 rows in set (0.00 sec)

mysql> use roopadb3;
Database changed
mysql> show tables;
+--------------------+
| Tables_in_roopadb3 |
+--------------------+
| countries          |
+--------------------+
1 row in set (0.00 sec)

mysql> CREATE TABLE jobs (
    ->     job_id INT PRIMARY KEY,
    ->     job_title VARCHAR(255) DEFAULT '',
    ->     min_salary INT DEFAULT 8000,
    ->     max_salary INT
    -> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> CREATE TABLE countries (
    ->     country_id INT AUTO_INCREMENT PRIMARY KEY,
    ->     country_name VARCHAR(255),
    ->     region_id INT
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc countries;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql>
```

```
    ->     region_id INT
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc countries;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> alter table countries rename to country_new;
Query OK, 0 rows affected (0.01 sec)

mysql> desc country_new;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql>
```

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```
    ->     first_name VARCHAR(50),
    ->     last_name VARCHAR(50),
    ->     email VARCHAR(100),
    ->     phone_number VARCHAR(20),
    ->     hire_date DATE,
    ->     job_title VARCHAR(100),
    ->     salary DECIMAL(10, 2),
    ->     department VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc employees;
+--------------+---------------+------+-----+---------+----------------+
| Field        | Type          | Null | Key | Default | Extra          |
+--------------+---------------+------+-----+---------+----------------+
| employee_id  | int           | NO   | PRI | NULL    | auto_increment |
| first_name   | varchar(50)   | YES  |     | NULL    |                |
| last_name    | varchar(50)   | YES  |     | NULL    |                |
| email        | varchar(100)  | YES  |     | NULL    |                |
| phone_number | varchar(20)   | YES  |     | NULL    |                |
| hire_date    | date          | YES  |     | NULL    |                |
| job_title    | varchar(100)  | YES  |     | NULL    |                |
| salary       | decimal(10,2) | YES  |     | NULL    |                |
| department   | varchar(100)  | YES  |     | NULL    |                |
+--------------+---------------+------+-----+---------+----------------+
9 rows in set (0.00 sec)

mysql> UPDATE employees
    -> SET email = 'not available';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> desc employees;
+--------------+---------------+------+-----+---------+----------------+
| Field        | Type          | Null | Key | Default | Extra          |
+--------------+---------------+------+-----+---------+----------------+
| employee_id  | int           | NO   | PRI | NULL    | auto_increment |
| first_name   | varchar(50)   | YES  |     | NULL    |                |
| last_name    | varchar(50)   | YES  |     | NULL    |                |
| email        | varchar(100)  | YES  |     | NULL    |                |
| phone_number | varchar(20)   | YES  |     | NULL    |                |
| hire_date    | date          | YES  |     | NULL    |                |
| job_title    | varchar(100)  | YES  |     | NULL    |                |
| salary       | decimal(10,2) | YES  |     | NULL    |                |
| department   | varchar(100)  | YES  |     | NULL    |                |
+--------------+---------------+------+-----+---------+----------------+
9 rows in set (0.00 sec)

mysql>
```

```
    ->      first_name VARCHAR(50),
    ->      last_name VARCHAR(50),
    ->      email VARCHAR(100),
    ->      phone_number VARCHAR(20),
    ->      hire_date DATE,
    ->      job_title VARCHAR(100),
    ->      salary DECIMAL(10, 2),
    ->      department VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc employees;
+--------------+---------------+------+-----+---------+----------------+
| Field        | Type          | Null | Key | Default | Extra          |
+--------------+---------------+------+-----+---------+----------------+
| employee_id  | int           | NO   | PRI | NULL    | auto_increment |
| first_name   | varchar(50)   | YES  |     | NULL    |                |
| last_name    | varchar(50)   | YES  |     | NULL    |                |
| email        | varchar(100)  | YES  |     | NULL    |                |
| phone_number | varchar(20)   | YES  |     | NULL    |                |
| hire_date    | date          | YES  |     | NULL    |                |
| job_title    | varchar(100)  | YES  |     | NULL    |                |
| salary       | decimal(10,2) | YES  |     | NULL    |                |
| department   | varchar(100)  | YES  |     | NULL    |                |
+--------------+---------------+------+-----+---------+----------------+
9 rows in set (0.00 sec)

mysql> UPDATE employees
    -> SET email = 'not available';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> desc employees;
+--------------+---------------+------+-----+---------+----------------+
| Field        | Type          | Null | Key | Default | Extra          |
+--------------+---------------+------+-----+---------+----------------+
| employee_id  | int           | NO   | PRI | NULL    | auto_increment |
| first_name   | varchar(50)   | YES  |     | NULL    |                |
| last_name    | varchar(50)   | YES  |     | NULL    |                |
| email        | varchar(100)  | YES  |     | NULL    |                |
| phone_number | varchar(20)   | YES  |     | NULL    |                |
| hire_date    | date          | YES  |     | NULL    |                |
| job_title    | varchar(100)  | YES  |     | NULL    |                |
| salary       | decimal(10,2) | YES  |     | NULL    |                |
| department   | varchar(100)  | YES  |     | NULL    |                |
+--------------+---------------+------+-----+---------+----------------+
9 rows in set (0.00 sec)

mysql>
```

```
1 •   SELECT * FROM roopadb3.employee;
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
102	Lex	De Haan	LDEH...	590.423.4567	1987-06-19	IT_PR...	17000.00	0.00	200	60
103	Alexander	Hunold	AHU...	590.423.4568	1987-06-20	IT_PR...	9000.00	0.00	300	90
104	Bruce	Ernst	BERNST	590.423.4569	1987-06-21	IT_PR...	9000.00	0.00	400	70
105	David	Austin	DAUS...	590.423.4560	1987-06-22	IT_PR...	6000.00	0.00	500	10
106	Valli	Pataballa	VPAT...	590.423.5567	1987-06-23	IT_PR...	4800.00	0.00	600	30
107	Diana	Lorentz	DLOR...	515.124.4569	1987-06-24	IT_PR...	4800.00	0.00	700	50
108	Nancy	Greenberg	NGRE...	515.124.4169	1987-06-25	IT_PR...	4800.00	0.00	800	60
109	Daniel	Faviet	DFAV...	515.124.4269	1987-06-26	IT_PR...	4800.00	0.00	900	60
110	John	Chen	JCHEN	515.124.4369	1987-06-27	IT_PR...	4800.00	0.00	101	90
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Columns:
EMPLOYEE_ID   int Pk
FIRST_NAME   varch
LAST_NAME   varch
EMAIL   varch
PHONE_NUMBER   varch
HIRE_DATE   date
JOB_ID   varch
SALARY   decim
COMMISSION_PCT decim
MANAGER_ID   int
DEPARTMENT_ID int

#	Time	Action	Message	Duration / Fetch
2	11:18:49	Apply changes to persons	Changes applied	
3	11:19:54	SELECT * FROM roopadb2.persons LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
4	11:31:55	Apply changes to orders	Error 1064: You have an error in your SQL syntax; check the manual that corresponds to your MySQL server v...	
5	11:35:49	Apply changes to orders	Error 1064: You have an error in your SQL syntax; check the manual that corresponds to your MySQL server v...	
6	13:53:19	SELECT * FROM roopadb3.countries LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
7	19:02:24	SELECT * FROM roopadb3.employee LIMIT 0, 1000	0 row(s) returned	0.015 sec / 0.000 sec

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'emp
loyee' at line 1
mysql> desc employee
    ->
    -> ;
+----------------+---------------+------+-----+---------+-------+
| Field          | Type          | Null | Key | Default | Extra |
+----------------+---------------+------+-----+---------+-------+
| EMPLOYEE_ID    | int           | NO   | PRI | NULL    |       |
| FIRST_NAME     | varchar(50)   | YES  |     | NULL    |       |
| LAST_NAME      | varchar(50)   | YES  |     | NULL    |       |
| EMAIL          | varchar(100)  | YES  |     | NULL    |       |
| PHONE_NUMBER   | varchar(20)   | YES  |     | NULL    |       |
| HIRE_DATE      | date          | YES  |     | NULL    |       |
| JOB_ID         | varchar(10)   | YES  |     | NULL    |       |
| SALARY         | decimal(10,2) | YES  |     | NULL    |       |
| COMMISSION_PCT | decimal(5,2)  | YES  |     | NULL    |       |
| MANAGER_ID     | int           | YES  |     | NULL    |       |
| DEPARTMENT_ID  | int           | YES  |     | NULL    |       |
+----------------+---------------+------+-----+---------+-------+
11 rows in set (0.00 sec)

mysql>
```

```
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> alter table countries rename to country_new;
Query OK, 0 rows affected (0.01 sec)

mysql> desc country_new;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| country_id   | int          | NO   | PRI | NULL    | auto_increment |
| country_name | varchar(255) | YES  |     | NULL    |                |
| region_id    | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> CREATE TABLE locations_new (
    ->      ID INT AUTO_INCREMENT PRIMARY KEY,
    ->  location_id INT,
    ->      street_address VARCHAR(255),
    ->      city VARCHAR(255),
    -> country_id VARCHAR(2)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> show tables;
+-------------------+
| Tables_in_roopadb3 |
+-------------------+
| country_new       |
| jobs              |
| locations_new     |
+-------------------+
3 rows in set (0.00 sec)

mysql> desc locations_new;
+----------------+--------------+------+-----+---------+----------------+
| Field          | Type         | Null | Key | Default | Extra          |
+----------------+--------------+------+-----+---------+----------------+
| ID             | int          | NO   | PRI | NULL    | auto_increment |
| location_id    | int          | YES  |     | NULL    |                |
| street_address | varchar(255) | YES  |     | NULL    |                |
| city           | varchar(255) | YES  |     | NULL    |                |
| country_id     | varchar(2)   | YES  |     | NULL    |                |
```

```
/clr

)

clr

/clr

clear


clear
system clr' at line 1
mysql> use roopadb3;
Database changed
mysql> create table countries(
    -> country_id int not null,
    -> country_name varchar(35),
    -> region_id int not null,
    -> primary key(country_id));
Query OK, 0 rows affected (0.03 sec)

mysql> show tables;
+-------------------+
| Tables_in_roopadb3 |
+-------------------+
| countries         |
+-------------------+
1 row in set (0.00 sec)

mysql> desc countries;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| country_id   | int          | NO   | PRI | NULL    |       |
| country_name | varchar(35)  | YES  |     | NULL    |       |
| region_id    | int          | NO   |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> use roopadb3;
Database changed
```

```
mysql> create table jobs(
    -> jon_id int not null,
    ->
    -> primary key(country_id));
ERROR 1072 (42000): Key column 'country_id' doesn't exist in table
mysql> create table jobs(
    -> job_id int not null,
    -> job_title varchar(45) not null,
    -> min_salary decimal(10,2),
    -> max_salary decimal(10,2) cheak (max_salary<=25000),
    -> primary key(job_id));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'che
ak (max_salary<=25000),
primary key(job_id))' at line 5
mysql> CREATE TABLE jobs (
    ->     job_id INT PRIMARY KEY,
    ->     job_title VARCHAR(50),
    ->     min_salary DECIMAL(10, 2),
    ->   max_salary DECIMAL(10, 2) CHECK (max_salary <= 25000)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> desc jobs;
+------------+---------------+------+-----+---------+-------+
| Field      | Type          | Null | Key | Default | Extra |
+------------+---------------+------+-----+---------+-------+
| job_id     | int           | NO   | PRI | NULL    |       |
| job_title  | varchar(50)   | YES  |     | NULL    |       |
| min_salary | decimal(10,2) | YES  |     | NULL    |       |
| max_salary | decimal(10,2) | YES  |     | NULL    |       |
+------------+---------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql>
```