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Câu 1:

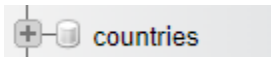
```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()

mycursor.execute("""
    CREATE TABLE countries (
        country_id INT PRIMARY KEY,
        country_name VARCHAR(100) NOT NULL,
        region_id INT
    )
""")
```

Kết quả:



Câu 2:

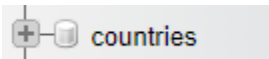
```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()

mycursor.execute("""
    CREATE TABLE countries (
        country_id INT PRIMARY KEY,
        country_name VARCHAR(100) NOT NULL,
        region_id INT
    )
""")
```

Kết quả:



	country_id	country_name	region_id
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Câu 3:

```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()
mycursor.execute("""
    CREATE TABLE countries (
        country_id INT PRIMARY KEY,
        country_name VARCHAR(100) NOT NULL CHECK (country_name IN
('Italy', 'India', 'China')),
        region_id INT
    )
""")

sql_insert_india = "INSERT INTO countries (country_id, country_name,
region_id) VALUES (%s, %s, %s)"
val_india = (2, 'India', 2)
mycursor.execute(sql_insert_india, val_india)

sql_insert_china = "INSERT INTO countries (country_id, country_name,
region_id) VALUES (%s, %s, %s)"
val_china = (3, 'China', 3)
mycursor.execute(sql_insert_china, val_china)

sql_insert_italy = "INSERT INTO countries (country_id, country_name,
region_id) VALUES (%s, %s, %s)"
val_italy = (4, 'Italy', 4)
mycursor.execute(sql_insert_italy, val_italy)

mydb.commit()
```

Kết quả:

				country_id	country_name	region_id
<input type="checkbox"/>		Sửa	 Chép	 Xóa bỏ	2 India	2
<input type="checkbox"/>		Sửa	 Chép	 Xóa bỏ	3 China	3
<input type="checkbox"/>		Sửa	 Chép	 Xóa bỏ	4 Italy	4

Câu 4:

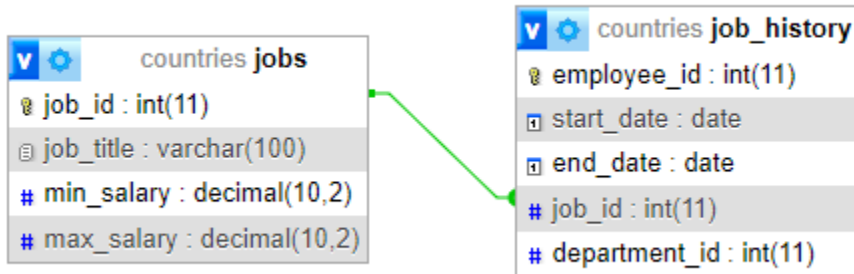
```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()
mycursor.execute("""
    CREATE TABLE IF NOT EXISTS jobs (
        job_id INT PRIMARY KEY,
        job_title VARCHAR(100) NOT NULL,
        min_salary DECIMAL(10, 2),
        max_salary DECIMAL(10, 2)
    )
""")
mycursor.execute("""
    CREATE TABLE IF NOT EXISTS job_history (
        employee_id INT PRIMARY KEY,
        start_date DATE,
        end_date DATE,
        job_id INT,
        department_id INT,
        CONSTRAINT fk_job_id FOREIGN KEY (job_id) REFERENCES jobs(job_id)
    )
""")

mydb.close()
```

Kết quả:



Ex1:

```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)
mycursor = mydb.cursor()
mycursor.execute("""
    CREATE TABLE countries (
        country_id INT PRIMARY KEY,
        country_name VARCHAR(100) NOT NULL,
        region_id INT
    )
""")
mycursor.execute("""
    INSERT INTO countries (country_id, country_name, region_id)
    VALUES (1, 'Vietnam', 10)
""")
mydb.close()
```

Kết quả:

				country_id	country_name	region_id
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ
				1	Vietnam	10

Ex2:

```
import mysql.connector







mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()

mycursor.execute("""
    INSERT INTO countries (country_id, country_name)
    VALUES (2, 'Japan')
""")
mydb.commit()

mydb.close()
```

Kết quả:

				country_id	country_name	region_id
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ
				1	Vietnam	10
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ
				2	Japan	NULL

Ex3:

Kết quả:

Ex4:

```
import mysql.connector






mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()

mycursor.execute("""
    INSERT INTO jobs (job_id, job_title, min_salary, max_salary)
    VALUES (2, 'Data Scientist', 50000, 120000)
    ON DUPLICATE KEY UPDATE
    job_title = VALUES(job_title), min_salary = VALUES(min_salary),
    max_salary = VALUES(max_salary)
    """)
mydb.commit()

mydb.close()
```

Kết quả:

				job_id	job_title	min_salary	max_salary
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ	1 Software Engineer 30000.00 80000.00
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ	2 Data Scientist 50000.00 120000.00

Ex5:

```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="countries"
)

mycursor = mydb.cursor()

mycursor.execute("""
    INSERT INTO jobs (job_id, job_title, min_salary, max_salary)
    VALUES (1, 'Software Engineer', 30000, 80000)
    ON DUPLICATE KEY UPDATE
    job_title = VALUES(job_title), min_salary = VALUES(min_salary),
    max_salary = VALUES(max_salary)
    """)
mydb.commit()

mydb.close()
```

Kết quả:

				job_id	job_title	min_salary	max_salary
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ	1 Software Engineer 30000.00 80000.00
<input type="checkbox"/>		Sửa		Chép		Xóa bỏ	2 Data Scientist 50000.00 120000.00