Testing:


```
ssovi@ada:~/CPSC 321/hw-3/hw3-samps7$ python3 hw3.py

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):2

Country code.................: RU
Country name.................: Fake Russia
Country per capita gdp (USD): 100000
Country inflation (pct).....: 6.4


1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake Russia (RU), per capita gdp $100000, inflation rate 6.4%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):5

Bye!
```

```
ssovi@ada:~/CPSC 321/hw-3/hw3-samps7$ python3 hw3.py

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake Russia (RU), per capita gdp $100000, inflation rate 6.4%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):2

Country code.................: US
Country name.................: Something Goes Here
Country per capita gdp (USD): 10
Country inflation (pct).....: 10.0

Country with same country code already exists...

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):5

Bye!
```

```
ssovi@ada:~/CPSC 321/hw-3/hw3-samps7$ python3 hw3.py

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake Russia (RU), per capita gdp $100000, inflation rate 6.4%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):3

Minimum per capita gdp (USD)..: 10000
Maximum per capita gdp (USD)..: 70000
Minimum inflation (pct).......: 3.0
Maximum inflation (pct).......: 7.0

Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%


1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):3

Minimum per capita gdp (USD)..: 0
Maximum per capita gdp (USD)..: 90000
Minimum inflation (pct).......: 2.3
Maximum inflation (pct).......: 5.0

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%


1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):5

Bye!
```

```
ssovi@ada:~/CPSC 321/hw-3/hw3-samps7$ python3 hw3.py

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake Russia (RU), per capita gdp $100000, inflation rate 6.4%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):4

Country code.................: UR
Country per capita gdp (USD): 10000
Country inflation (pct).....: 3.0

Country with given country code does not exist...

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):4

Country code.................: RU
Country per capita gdp (USD): 100
Country inflation (pct).....: 7.0

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):1

Fake China (CN), per capita gdp $60800, inflation rate 2.4%
Fake Europa (EU), per capita gdp $100000, inflation rate 2.5%
Fake Japan (JP), per capita gdp $20456, inflation rate 4.5%
Fake Russia (RU), per capita gdp $100, inflation rate 7.0%
Fake United States (US), per capita gdp $50000, inflation rate 1.4%

1. List countries
2. Add country
3. Find countries based on gdp and inflation
4. Update country's gdp and inflation
5. Exit
Enter you choice (1-5):5

Bye!
```

Write up:
Over the course of this project, I did not run into as many issues as usual due to the straightforwardness of the sample code we were provided for python database querying. I chose to do this project in Python because it is the only programming language from the three options that I am actively using in classes right now (for Machine Learning and Intelligent Systems by Professor Morehead). As such, I decided to go with what I was most familiar with for this project (especially because each and every one of my other classes also had homework due on the same day). With Python as a language, one thing I struggled with was the usage of for loops because they work more similarly to for-each loops which I almost never used before Python. I also struggled with variable usage because the method of defining variables in Python is more confusing to me since I prefer to define and initialize my variables before using them to be sure that variables were previously defined. One thing that took me a while to realize was that I would need to manually update the database with any locally changed values. This is since the program uses a local instance of the database rather than actually modifying the database immediately itself. Once I realized this, I started putting “con.commit()” everywhere in my code until I realized that I really only needed it in sections where I was updating or inserting values for this project.