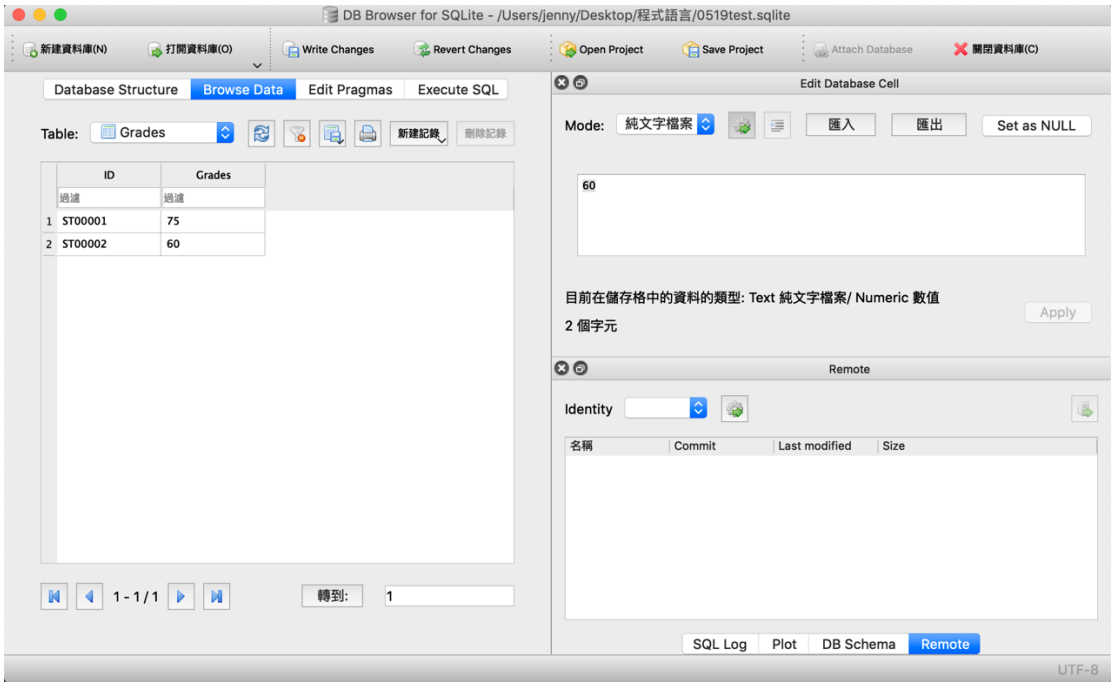
Task1.

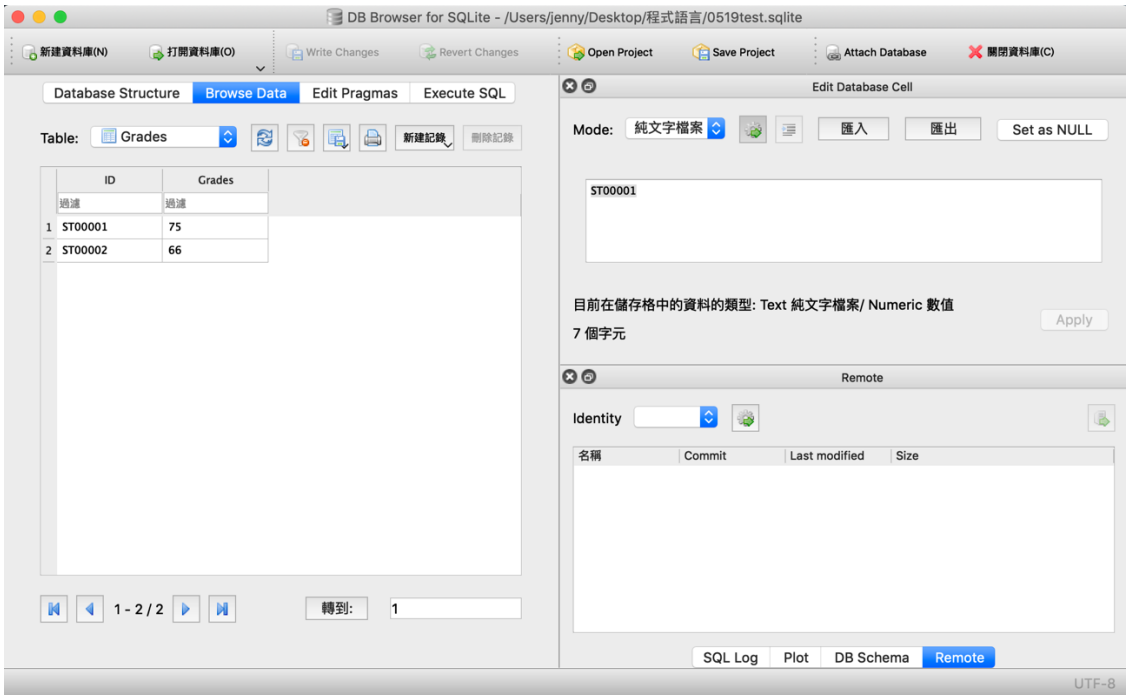
A.新增

```
#Task1
#新增
import sqlite3
conn = sqlite3.connect('0519test.sqlite')
score = input('Enter your scores:')
sqlstr="insert into Grades values('ST00002', '%d' %(score))"
conn.execute(sqlstr)

conn.commit()
conn.close()
```



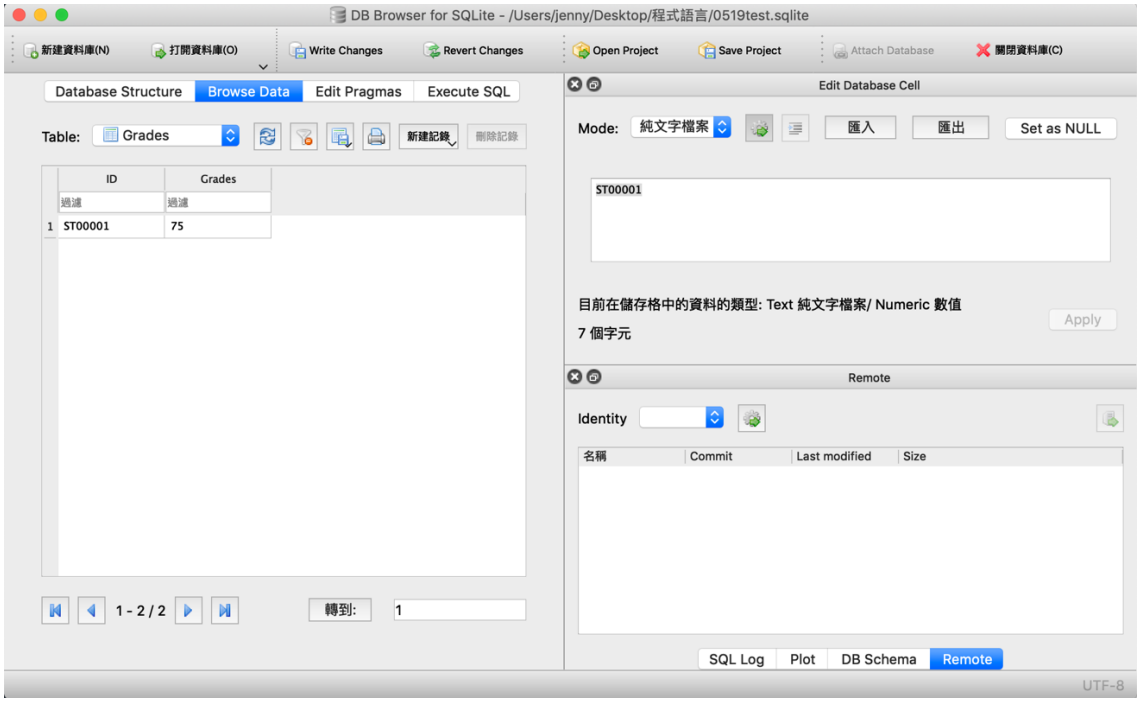
B.修改

```
#修改
import sqlite3
conn = sqlite3.connect('0519test.sqlite')
updateid = input('Enter ID:')
updatescore = input('Enter new scores:')
sqlstr="update Grades set Grades = '%d' %(updatescore) where id = '%s' %(updateid) "
conn.execute(sqlstr)

conn.commit()
conn.close()
```



C.刪除

```
#刪除
import sqlite3
conn = sqlite3.connect('0519test.sqlite')
sqlstr="delete from Grades where id = 'ST00002' "
conn.execute(sqlstr)
```



Task2.

A.

```
In [10]: #Task2 A
import pandas as pd #載入pandas套件並命名為pd
csvdata = pd.read_csv('COVID19_line_list_data.csv') #以read_csv函式讀取csv
print(csvdata[(csvdata['location'] == 'Tianjin') & (csvdata['age'] > 35)])
```

```
      id  statistic reporting date  \
3      4        519      1/21/2020
4      5        519      1/21/2020
80    81        519      1/23/2020
95    96        519      1/24/2020
117  118        519      1/21/2020
118  119        519      1/21/2020
119  120        519      1/22/2020
120  121        519      1/22/2020
121  122        519      1/23/2020
122  123        519      1/24/2020
125  126        519      1/25/2020
150  151        519      1/25/2020
151  152        519      1/25/2020
163  164        519      1/26/2020
173  174        519      1/26/2020
174  175        519      1/26/2020
175  176        519      1/26/2020

                                               summary location country  \
3    new confirmed imported COVID-19 pneumonia in T...  Tianjin   China
4    new confirmed imported COVID-19 pneumonia in T...  Tianjin   China
80   new confirmed COVID-19 pneumonia in Tianjin, m...  Tianjin   China
95   new confirmed imported COVID-19 pneumonia pati...  Tianjin   China
117  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
118  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
119  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
120  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
121  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
122  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
125  confirmed imported COVID-19 pneumonia patient ...  Tianjin   China
150  confirmed COVID-19 pneumonia patient No.11 in ...  Tianjin   China
151  confirmed COVID-19 pneumonia patient No.12 in ...  Tianjin   China
163  confirmed COVID-19 pneumonia patient No.14 in ...  Tianjin   China
173  new confirmed COVID-19 pneumonia patient No.15...  Tianjin   China
174  new confirmed COVID-19 pneumonia patient No.16...  Tianjin   China
175  new confirmed COVID-19 pneumonia patient No.17...  Tianjin   China

     gender   age symptom_onset  If_onset_approximated  ... exposure_start  \
3    female  60.0           NaN                    NaN  ...            NaN
4      male  58.0           NaN                    NaN  ...            NaN
80     male  46.0           NaN                    NaN  ...            NaN
95     male  39.0           NaN                    NaN  ...            NaN
117  female  59.0     1/14/2020                    0.0  ...            NaN
118    male  57.0     1/18/2020                    0.0  ...            NaN
119  female  68.0     1/14/2020                    0.0  ...            NaN
120    male  40.0     1/14/2020                    0.0  ...            NaN
121    male  46.0     1/15/2020                    0.0  ...            NaN
```

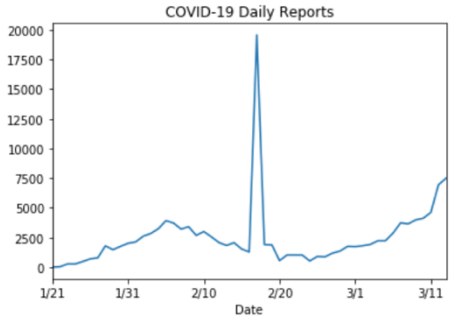
B.

```
In [15]: #Task2 B
import pandas as pd #載入pandas套件並命名為pd
csvdata = pd.read_csv('COVID19_line_list_data.csv') #以read_csv函式讀取csv
print(csvdata[csvdata['statistic'] == 519].groupby(by = 'country')['age'].mean())
```

```
country
Afghanistan    35.000000
Algeria              NaN
Australia      42.000000
Austria        24.000000
Bahrain              NaN
Belgium              NaN
Cambodia       60.000000
Canada         42.583333
China          49.000000
Croatia              NaN
Egypt                NaN
Finland        32.000000
France         46.611111
Germany        40.214286
Hong Kong      56.075269
India                NaN
Iran                 NaN
Israel               NaN
Italy          35.000000
Japan          55.462366
Kuwait               NaN
Lebanon        45.000000
Malaysia       41.304348
Nepal          32.000000
Phillipines    47.333333
Russia               NaN
Singapore      43.516667
South Korea    47.641304
Spain          43.809524
Sri Lanka      40.000000
Sweden         25.000000
Switzerland    70.000000
Taiwan         51.935484
Thailand       48.166667
UAE            44.666667
UK             53.000000
USA            50.000000
Vietnam        36.525000
Name: age, dtype: float64
```

Task3.

In [4]:
```
import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
tdata = pd.read_csv('cases_add_Taiwan.csv', encoding = 'big5')
tdata[['Date','Worldwide']].plot(kind = 'line', x = 'Date', y = 'Worldwide', title = 'COVID-19 Daily Reports',
plt.show()
```



Task4.

In [5]:
```
import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
tdata = pd.read_csv('cases_add_Taiwan.csv', encoding = 'big5')
listx1 = tdata['Date']
listy1 = tdata['Taiwan']
plt.plot(listx1, listy1, label = 'Taiwan', color='blue')
listx2 = tdata['Date']
listy2 = tdata['China']
plt.plot(listx2, listy2, label='China', color='red')
listx3 = tdata['Date']
listy3 = tdata['France']
plt.plot(listx3, listy3, label='France', color='green')
plt.legend()
plt.title('Covid-19 Situation Reports')
plt.xlabel('Date')
plt.ylabel('Cases')
plt.show()
```