



Homework : sqlite3 Report

COMPUTER TECHNOLOGIES IN TELECOMMUNICATIONS

WILLIAM BAUDRAND CHAUDEYRAC
November 2021

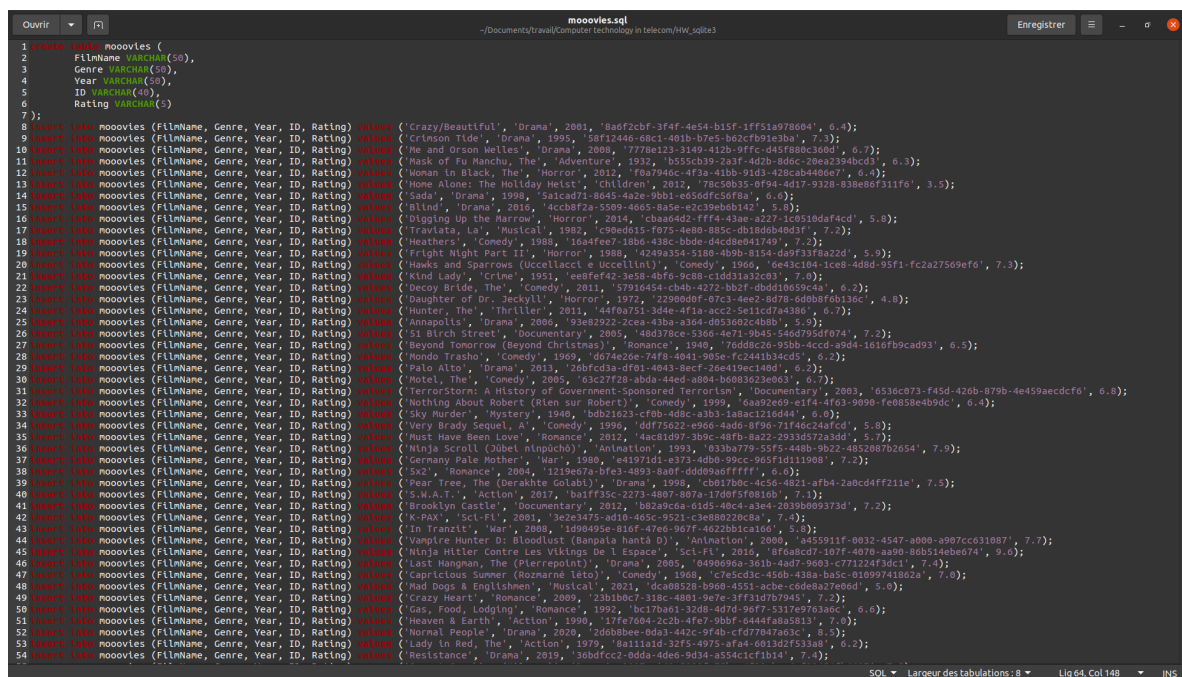
1 Introduction

In one of the previous meeting, we have seen how to install sqlite3 on python, and also how to use the functions that we have seen on Mysql previously. This time, i will manipulate databases with python using sqlite3 tools.

2 Convert a .sql file to a .db file

2.1 Creating a .sql file

I started this project by creating a database. I generated a database using [Mockaroo](#), with 5 columns : the Film name, it's genre, a Year (which was at first not accurate, an ID (here an hexadecimal code) and a rating which also was inaccurate. Then, I went on [IMDB](#) in order to modify the Year and the Rating of each film. I modified records manually, because some of the generated movies names haven't been found on the IMDB website. The result is visible on figure 1.



```
1 INSERT INTO moovies (
2   FilmName VARCHAR(50),
3   Genre VARCHAR(50),
4   Year VARCHAR(50),
5   ID VARCHAR(40),
6   Rating VARCHAR(5)
7);
8 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Crazy/Beautiful', 'Drama', 2001, '8a6f2cbf-3f4f-4e54-b15f-1ff51a978604', 6.4);
9 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Crisson Tide', 'Drama', 1995, '58f1244b-68c1-481b-b7e5-b62c9b103ba', 7.3);
10 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('He and Orson Welles', 'Drama', 2008, '7770e123-3149-412b-9ffc-d45f88c36d', 6.7);
11 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Mask of Fu Manchu, The', 'Adventure', 1932, 'b555cb39-2a3f-4d2b-8d6c-20ea2394bcd3', 6.3);
12 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Woman in Black, The', 'Horror', 2012, 'f0a7940c-4f3a-41bb-91d3-428cab4a06e7', 6.4);
13 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Home Alone: The Holiday Heist!', 'Children', 2012, '78c5b035-9f9a-4d17-9328-838e6ef311fe', 3.5);
14 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Sada', 'Drama', 1998, '5a1cad71-8d45-4a2e-9bb1-e55d6fc56f8a', 6.0);
15 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Blind', 'Drama', 2016, '4ccb8f2a-5509-4665-8a5e-e2c39eb6b142', 5.8);
16 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Digging Up the Marrow', 'Horror', 2014, 'cbaa64d2-ffff-43ae-a227-1c0510dafacd', 5.8);
17 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Traviata, La', 'Musical', 1992, 'c9edd515-f975-4e8b-8b5c-dbd186da0d3f', 7.2);
18 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Heathers', 'Comedy', 1988, '16a4fee7-18b6-438c-bbde-d4cd8e041749', 7.2);
19 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Fright Night Part II', 'Horror', 1988, '4249a354-518b-4b9b-8154-da9f33f8a22d', 5.9);
20 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Hawks and Sparrows (Uccellacci & Uccellini)', 'Comedy', 1966, '6e43c104-1ce8-4d8d-95f1-fc2a27569ef6', 7.3);
21 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Kind Lady', 'Crime', 1951, 'eeefef42-3a5b-4b76-9c8b-c1bd131a32c9', 7.0);
22 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Decoy Bride, The', 'Comedy', 2011, '57916454-cb4b-4272-bb2f-dbd10659c4a', 6.2);
23 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Daughter of Dr. Jeckyll', 'Horror', 1972, '2298b8df-07c3-4ee2-8d78-d0b0bf6b136c', 4.8);
24 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Hunter, The', 'Thriller', 2011, '44f0a751-3d4e-4f1a-acc2-2e11cd7a4886', 6.7);
25 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Annapolis', 'Drama', 2006, '93e82922-2cea-43ba-a364-d053602c4bab', 5.9);
26 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('51 Birch Street', 'Documentary', 2005, '48d378ce-5366-4e71-9b45-546d795df074', 7.2);
27 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Beyond Tomorrow (Beyond Christmas)', 'Romance', 1946, '76dd8c26-950b-4ccd-49d4-1616f99cad93', 6.5);
28 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Hondo Trashed', 'Comedy', 1969, 'd07a2d6e-7478-4e41-9d5a-fc2441b34d5f', 6.2);
29 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Palo Alto', 'Drama', 2013, '26bfcda3-df01-4043-becf-26e419ec140d', 6.2);
30 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Motel, The', 'Comedy', 2005, '63c27f28-abda-44ed-a804-b083623e063', 6.7);
31 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Terrorstorm: A History of Government-Sponsored Terrorism', 'Documentary', 2003, '6536c873-f45d-426b-879b-4e459aecdccf6', 6.8);
32 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Nothing About Robert (Rien sur Robert)', 'Comedy', 1999, '6a9a2e69-e1f4-4f63-9090-fe0858e4b9dc', 6.4);
33 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Sky Murder', 'Mystery', 1940, 'bdb21623-cf0b-4d8c-a3b3-1a8ac1216d44', 6.0);
34 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Very Brady Sequel, A', 'Comedy', 1996, 'd0ff75622-e966-4ade-8f96-71746c24afcd', 5.8);
35 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Must Have Been Love', 'Romance', 2012, '4ac41d97-b93c-4afb-8a22-2933d572aadd', 5.7);
36 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Ninja Scroll (Jûbei ninpûchô)', 'Animation', 1993, '033ba779-55f5-44ab-9b22-4852087b2654', 7.9);
37 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Germany Pale Mother', 'War', 1986, 'e41971d1-e373-4d8b-99cc-965f1d11908', 7.2);
38 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('S2', 'Romance', 2002, '121be07a-bf63-489b-8a0f-d6d99a8fffff', 6.0);
39 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Pear Tree, The (Derakhte Golabi)', 'Drama', 1998, 'cb017bdc-4c5b-4d21-afb4-2a0cd4ff211e', 7.5);
40 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('S.W.A.T.', 'Action', 2017, 'ba1ff35c-2273-4807-807a-17d0f5f081b6', 7.1);
41 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Brooklyn Castle', 'Documentary', 2012, 'bd293c0a-c1d5-40c4-a3e4-203b0809373d', 7.2);
42 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('K-PAX', 'Sci-Fi', 2001, '3e23a755-ad1b-465c-9521-c3a88029c8a', 7.2);
43 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('In Transit', 'War', 2008, '1d90495e-816f-47e6-967f-4622bb1ca160', 5.8);
44 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Vampire Hunter D: Bloodlust (Banpaia hantô D)', 'Animation', 2006, 'a45911f1-0632-4547-a808-a907cc631087', 7.7);
45 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Ninja Hitler Contre Les Vikings De L'Espagne', 'Sci-Fi', 2016, '8f6ad8f7-107f-407b-a99e-8b05344be674', 9.0);
46 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Last Happon, The (Pierrepont)', 'Drama', 2005, '049e96a-361b-4ad7-9e03-c771214f3dcl', 7.4);
47 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Capricious Summer (Rozmarné léto)', 'Comedy', 1968, 'c7e5cd3c-456b-438a-ba5c-01099741862a', 7.0);
48 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Mad Dogs & Englishmen', 'Musical', 2021, 'dca08528-b968-4551-acbe-code8a2760ed', 5.0);
49 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Crazy Heart', 'Romance', 2009, '231bbcf7-318c-4881-9a7e-3f3fd707945', 7.2);
50 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Gas, Food, Lodging', 'Romance', 1992, 'bc17ba01-3208-4d7d-9677-93f71e9763aac', 6.0);
51 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Heaven & Earth', 'Action', 1990, '17fe7604-2c2b-4fe7-9b9f-6444faba5813', 7.0);
52 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Normal People', 'Drama', 2020, '2dd8bbe6-8d33-4a2e-9f4b-cf4770b7a63c', 8.3);
53 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Lady in Red, The', 'Action', 1979, '8a11aid-32f5-4975-af4d-1013d2f533a0', 6.2);
54 INSERT INTO moovies (FilmName, Genre, Year, ID, Rating) VALUES ('Resistance', 'Drama', 2019, '36bdfcc2-0dda-4dee-9d34-a554c1cf1b14', 7.4);
```

Figure 1: 100 records sql database (modified)

2.2 Create a converter in Python

First, i tried to use the sql database with sqlite3. After many failure, i decided to look at the homework task and saw that we should use a .db file, which make more sense. In the first time, i look through internet to find a .sql to .db converter. It looks like it doesn't exist. So, i searched for someone that has used a .sql database with sqlite3 and that has issues with it. Thanks to that, i found a code that i modified to fit my files and goals to be able to convert my .sql file into a .db (figure 2).

With this code, i obtained a .db file that could not bo read. So, to be able to see if my code worked, i installed DB Browser for Sqlite, that help me to take a screenshot of the database (figure 3).

```
# the way we want to name the file
DATABASE = './moovies.db'
DEBUG = True

app = Flask(__name__)
app.config.from_object(__name__)

def init_db():
    with closing(connect_db()) as db:
        with app.open_resource('moovies.sql', mode='r') as f: #open the sql file and read it
            db.cursor().executescript(f.read())
            db.commit() # save the modifications into the database

def connect_db():
    return sqlite3.connect(app.config['DATABASE'])
```

Figure 2: Script to create a new database file from a sql

moovies					
Table : moovies					
	FilmName	Genre	Year	ID	Rating
	Filtre	Filtre		Filtre	...
1	Crazy/Beautiful	Drama	2001	8a6f2cbf-3f4f-4e54-b15f-1ff51a978604	6.4
2	Crimson Tide	Drama	1995	58f12446-68c1-401b-b7e5-b62cfb91e3ba	7.3
3	Me and Orson Welles	Drama	2008	7778e123-3149-412b-9ffc-d45f880c360d	6.7
4	Mask of Fu Manchu, The	Adventure	1932	b555cb39-2a3f-4d2b-8d6c-20ea2394bcd3	6.3
5	Woman in Black, The	Horror	2012	f0a7946c-4f3a-41bb-91d3-428cab4406e7	6.4
6	Home Alone: The Holiday Heist	Children	2012	78c50b35-0f94-4d17-9328-838e86f311f6	3.5
7	Sada	Drama	1998	5a1cad71-8645-4a2e-9bb1-e656dfc56f8a	6.6
8	Blind	Drama	2016	4ccb8f2a-5509-4665-8a5e-e2c39eb6b142	5.8
9	Digging Up the Marrow	Horror	2014	cbaa64d2-fff4-43ae-a227-1c0510daf4cd	5.8
10	Traviata, La	Musical	1982	c90ed615-f075-4e80-885c-db18d6b40d3f	7.2
11	Heathers	Comedy	1988	16a4fee7-18b6-438c-bbde-d4cd8e041749	7.2
12	Fright Night Part II	Horror	1988	4249a354-5180-4b9b-8154-da9f33f8a22d	5.9
13	Hawks and Sparrows (Uccellacci e Uccellini)	Comedy	1966	6e43c104-1ce8-4d8d-95f1-fc2a27569ef6	7.3
14	Kind Lady	Crime	1951	ee8fef42-3e58-4bf6-9c88-c1dd31a32c03	7.0
15	Decoy Bride, The	Comedy	2011	57916454-cb4b-4272-bb2f-dbd10659c4a	6.2
16	Daughter of Dr. Jeckyll	Horror	1972	22900d0f-07c3-4ee2-8d78-6d0b8f6b136c	4.8
17	Hunter, The	Thriller	2011	44f0a751-3d4e-4f1a-acc2-5e11cd7a4386	6.7
18	Annapolis	Drama	2006	93e82922-2cea-43ba-a364-d053602c4b8b	5.9
19	51 Birch Street	Documentary	2005	48d378ce-5366-4e71-9b45-546d795df074	7.2
20	Beyond Tomorrow (Beyond Christmas)	Romance	1940	76dd8c26-95bb-4ccd-a9d4-1616fb9cad93	6.5
21	Mondo Trasho	Comedy	1969	d674e26e-74f8-4041-905e-fc2441b34cd5	6.2
22	Palo Alto	Drama	2013	26bfcd3a-df01-4043-8ecf-26e419ec140d	6.2
23	Motel, The	Comedy	2005	63c27f28-abda-44ed-a804-b6083623e063	6.7
24	TerrorStorm: A History of Government-Spo...	Documentary	2003	6536c073-f45d-426b-879b-4e459aecdcf6	6.8
25	Nothing About Robert (Rien sur Robert)	Comedy	1999	6aa92e69-e1f4-4f63-9090-fe0858e4b9dc	6.4
26	Sky Murder	Mystery	1940	bdb21623-cf0b-4d8c-a3b3-1a8ac1216d44	6.0
27	Very Brady Sequel, A	Comedy	1996	ddf75622-e966-4ad6-8f96-71f46c24afcd	5.8
28	Must Have Been Love	Romance	2012	4ac81d97-3b9c-48fb-8a22-2933d572a3dd	5.7
29	Ninja Scroll (Jûbei ninpûchô)	Animation	1993	033ba779-55f5-448b-9b22-4852087b2654	7.9
30	Germany Pale Mother	War	1980	e41971d1-e373-4db0-99cc-965f1d111908	7.2

Figure 3: The database in .db, visible thanks to DB browser

3 Having fun with the Database

Let's modify the database that we have now !

3.1 Creating the database and the table

To create a database and to be able to reuse this code in future projects, it is better to use OOP with class (figure 4). This is why i created a class named DATA_BASE. the function `__init__` is used to create a new object (a new database) and the `Table_Creator` will be use to create a table to store the data, the same way as the previous homework on Mysql.

```
class Data_Base():  
  
    def __init__(self,DB_Name : str):# To create the database  
        self.db = sqlite3.connect(DB_Name)  
        self.cur = self.db.cursor()  
  
    def Table_creator(self, Table_name : str, column : str):# To cleate a table where Data will be store  
        self.cur.execute('CREATE table IF NOT EXISTS' + name + ' ( ' + column + ' )' )  
        self.db.commit()
```

Figure 4: Object creation for the database and the table

3.2 display existing data

It is important to know what are the data inside the database to be able to see if the modifications have been applied. That is why i've created an other method to print all the data from the database (figure 5). The, i use will use this method many times in the main program such as in figure 6.

```
def Print_Data_Table(self, column : str , Table : str):#print All the Data that is inside the table  
  
    self.cur.execute("SELECT " + column + " FROM " + Table ) #taking all the data contained in the table  
    for ligne in self.cur :# displaying all the data from the table  
        print("FilmName : {0} | Genre : {1} | Year : {2} | Rating : {4} | ID : {3}".format(ligne[0],ligne[1],ligne[2],ligne[3],ligne[4]))
```

Figure 5: creation of the SELECT * From datatable

```
Test_DB = Data_Base("moovies.db") #I create my object that contain the data from the database moovies  
print("\n Original Data \n")  
Test_DB.Print_Data_Table("*","moovies")
```

Figure 6: using the method in the main program

On figure 7 and 8, we can see that the results printed by my method are exactly the same as the one contained in the database file. It's great news, because i didn't applied for now a modification to the database.

```

Original Data
FfilmName Crazy/Beautiful | Genre: Drama | Year: 2001 | Rating: 6.4 | ID: 8a6f2cbf-3faf-4e54-b15f-1ff51a978604
FfilmName Crinon Tide | Genre: Drama | Year: 1995 | Rating: 7.3 | ID: 58f12446-08c1-401b-b7e5-b62cfb91e3ba
FfilmName Me and Orson Welles | Genre: Drama | Year: 2008 | Rating: 6.7 | ID: 7778e123-3149-412b-9ffc-d45f880c360d
FfilmName Mask of Fu Manchu, The | Genre: Adventure | Year: 1932 | Rating: 6.3 | ID: b555cb39-2a3f-4d2b-8d6c-20ea2394bcd3
FfilmName Woman in Black, The | Genre: Horror | Year: 2012 | Rating: 6.4 | ID: 6a37940c-4f2a-413b-91d1-428cab406e7
FfilmName Home Alone: The Holiday Heist | Genre: Children | Year: 2012 | Rating: 3.5 | ID: 78c50b35-0f94-4d17-9328-838e8bf311fe
FfilmName Sada | Genre: Drama | Year: 1998 | Rating: 6.6 | ID: 5a1cad71-8645-4a2e-9bb1-e65ed0c3c5fa
FfilmName Blind | Genre: Drama | Year: 2016 | Rating: 5.8 | ID: 4ccb8f2a-5509-4665-ba5e-e2c39ebdb142
FfilmName Dying Up the Marrow | Genre: Horror | Year: 2014 | Rating: 5.8 | ID: cbaed4d2-ffff-43ae-a227-1c0510daf4cd
FfilmName Travolta, La | Genre: Musical | Year: 1982 | Rating: 7.2 | ID: c90ed615-0f75-4e8b-885c-dbd8d640d3f
FfilmName Heathers | Genre: Comedy | Year: 1988 | Rating: 7.2 | ID: 16a4fee7-18b6-438c-bbde-d4cd8e841749
FfilmName Fright Night Part II | Genre: Horror | Year: 1988 | Rating: 5.9 | ID: 42a9a354-518b-4b9b-8154-d9f33f8a22d
FfilmName Hawks and Sparrows (Uccellacci e Uccellini) | Genre: Comedy | Year: 1996 | Rating: 7.3 | ID: 6e43c104-1ce8-4d8d-95f1-fc2a27569e6
FfilmName Kind Lady | Genre: Crime | Year: 1951 | Rating: 7.0 | ID: ee8fe42-3e58-4bf6-9c88-c1dd31a32c03
FfilmName Decoy Bride, The | Genre: Comedy | Year: 2011 | Rating: 6.2 | ID: 57916454-cb4b-4272-b6f7-bdadd10659cd
FfilmName Daughter of Dr. Jekyll | Genre: Horror | Year: 1972 | Rating: 4.8 | ID: 22980d9f-0f3c-4ee2-8d78-adedb6f6b136c
FfilmName Hunter, The | Genre: Thriller | Year: 2011 | Rating: 6.7 | ID: 44f0a751-3d4e-4f1a-acc2-5e11cd7a4386
FfilmName Annapolis | Genre: Drama | Year: 2006 | Rating: 5.9 | ID: 93e82922-2cea-43ba-a364-d053602c48bb
FfilmName Si Birch Street | Genre: Documentary | Year: 2005 | Rating: 7.2 | ID: 40b37dce-538b-4e71-9b45-546d795df074
FfilmName Beyond Tomorrow (Beyond Christmas) | Genre: Romance | Year: 1940 | Rating: 6.5 | ID: 76dd8c26-95bb-4ccd-a9d4-1616fb9cad93
FfilmName Mondo Trasho | Genre: Comedy | Year: 1969 | Rating: 6.2 | ID: d674e26e-74f8-4041-905e-fc2441b34c5
FfilmName Palo Alto | Genre: Drama | Year: 2013 | Rating: 6.2 | ID: 26bfc3da-df01-4043-beef-26e419ec140d
FfilmName Motel, The | Genre: Comedy | Year: 2005 | Rating: 6.7 | ID: 63c27f98-abda-4aed-a0e4-b6003623e063
FfilmName TerrorStorn: A History of Government-Sponsored Terrorism | Genre: Documentary | Year: 2003 | Rating: 6.8 | ID: 6536c073-f45d-426b-879b-4e459aeacdfe
FfilmName Nothing About Robert (Rien sur Robert) | Genre: Comedy | Year: 1999 | Rating: 6.4 | ID: 6aa92ed9-e1f4-4f63-9090-fe0858e4b9dc
FfilmName Sky Murder | Genre: Mystery | Year: 1940 | Rating: 6.0 | ID: bdb21223-cf0b-4d8c-a3b3-1a8c1216d44
FfilmName Very Brady Sequel, A | Genre: Comedy | Year: 1996 | Rating: 5.8 | ID: dd7f5622-e966-4ad6-bf96-71f46c24afcd
FfilmName Must Have Been Love | Genre: Romance | Year: 2012 | Rating: 5.7 | ID: 4ac81d97-3b9c-48fb-8a22-2933d572a3dd
FfilmName Ninja Scroll (Shubet ninpicho) | Genre: Animation | Year: 1993 | Rating: 7.9 | ID: 633ba779-35f5-440b-9b22-4852087b2654
FfilmName Germany Pale Hother | Genre: War | Year: 1980 | Rating: 7.2 | ID: e41071d1-e373-4d0b-90cc-9e5f1d111908
FfilmName SX2 | Genre: Romance | Year: 2004 | Rating: 6.6 | ID: 1219e07a-bf63-4893-8a0f-dd09a9af6fff
FfilmName Pear Tree, The (Derakhte Golab) | Genre: Drama | Year: 1998 | Rating: 7.5 | ID: cb0170c-4c56-4821-afb4-2a0cd4ff211e
FfilmName S.W.A.T. | Genre: Action | Year: 2017 | Rating: 7.1 | ID: b1a1f5c5-2223-4807-b07e-11d0f5f801b0
FfilmName Brooklyn Castle | Genre: Documentary | Year: 2012 | Rating: 7.2 | ID: b82a9c6a-61d5-40c4-a3e4-2039b009373d
FfilmName K-PAX | Genre: Sci-Fi | Year: 2001 | Rating: 7.4 | ID: 3e2e3475-ad10-465c-9521-c3e880220c8a
FfilmName In Transit | Genre: War | Year: 2008 | Rating: 5.8 | ID: 1d98495e-b10f-47ee-9e7f-4d27b0c1a169
FfilmName Vampire Hunter D: Bloodlust (Banpaia hantô D) | Genre: Animation | Year: 2009 | Rating: 7.7 | ID: a455911f-0032-4547-a000-a907cc631007
FfilmName Ninja Hitler Centre Les Vikings De L'espace | Genre: Sci-Fi | Year: 2016 | Rating: 9.6 | ID: 8f6a8cd7-107f-407b-a990-8b5b14eeb074
FfilmName Last Hangan, The (Pierrefolpnt) | Genre: Drama | Year: 2005 | Rating: 7.4 | ID: 6496096a-361b-4ad7-9603-c77122473dc1
FfilmName Caprice (L'été du capitaine) | Genre: Comedy | Year: 1968 | Rating: 7.4 | ID: c7e3dc3c-450b-43ba-ba5c-01099741862a
FfilmName Mad dogs & Englishmen | Genre: Musical | Year: 2021 | Rating: 5.0 | ID: dca08528-b960-4551-acbe-cd68a27e06d
FfilmName Crazy Heat | Genre: Romance | Year: 2009 | Rating: 7.2 | ID: 23b1b0c7-318c-4801-9e7e-3ff31d7b7945
FfilmName Gas, Food, Lodging | Genre: Romance | Year: 1992 | Rating: 6.6 | ID: bc17b601-3208-407d-9e07-5317f69763a0c
FfilmName Heaven & Earth | Genre: Action | Year: 1990 | Rating: 7.0 | ID: 17f67d04-2c2b-4f67-90b7-6444f6a0a313
FfilmName Normal People | Genre: Drama | Year: 2020 | Rating: 8.5 | ID: 2d6bb8ee-0da3-442c-9f4b-cfd77847a63c
FfilmName Lady in Red, The | Genre: Action | Year: 1979 | Rating: 6.2 | ID: 8a11a1d3-32f5-4975-af4a-6013d2f533a8
FfilmName Resistance | Genre: Drama | Year: 2019 | Rating: 7.4 | ID: 36bf6c3c-0dda-46e6-36da-2554c1cf1b14
FfilmName Secret Sunshine (Milyang) | Genre: Drama | Year: 2007 | Rating: 7.5 | ID: 60e5880f-75be-4f39-bcac-f23654fb6697
FfilmName Look Back in Anger | Genre: Drama | Year: 1959 | Rating: 7.0 | ID: ed680abd-7475-43fd-a99b-425baa2519fb
FfilmName Orgy of the Dead | Genre: Horror | Year: 1965 | Rating: 3.0 | ID: 1d4c383e-4a45-427f-9407-01b7feaca9b5

```

Figure 7: Original data screen 1

```

Marley & Me: The Puppy Years | Genre: Children | Year: 2011 | Rating: 3.5 | ID: 58e42ee7-f523-421c-81ad-40bf6df6f827
Singapore Sling (Singapore sling: O anthropos pou agapise ena ptoma) | Genre: Horror | Year: 1990 | Rating: 6.5 | ID: 89762913-3642-4a21-a959-330f6705673e
Love Beats Rhymes | Genre: Drama | Year: 2017 | Rating: 5.5 | ID: ac2cb8205-d795-4b54-ab5e-13bf0f07c2c3
High Risk | Genre: Action | Year: 1999 | Rating: 6.1 | ID: 8b9f6e72-e223-404e-a03b-6329a8a133a4
Darkest Hour, The | Genre: Horror | Year: 2011 | Rating: 4.9 | ID: ae793eda-475b-4dd1-b466-bda0f7366564
The Pee-wee Herman Show on Broadway | Genre: Comedy | Year: 2011 | Rating: 7.8 | ID: abe072a2-bed3-4a0e-84c0-24f848fdcb4
Dog Problem, The | Genre: Comedy | Year: 2006 | Rating: 6.2 | ID: 288140b-ecdb-43f0-9370-9fa1c27b0b04
Beautiful Mind, A | Genre: Drama | Year: 2001 | Rating: 8.2 | ID: 18f1bc24-f52b-47b4-ad29-a849dbd2bdc9
Miss Métro | Genre: Comedy | Year: 2005 | Rating: 6.1 | ID: 4a0f45a8-3eb3-4c67-9f5a-56705492a08a
Forced Vengeance | Genre: Adventure | Year: 1902 | Rating: 5.6 | ID: 8599a89c-ed37-d4ec-af87-cf7ae9826291
District 13: Ultimatum (Banlieue 13 - Ultimatum) | Genre: Action | Year: 2009 | Rating: 6.5 | ID: 875100b6-bf14-49c4-838e-bdcd3e14a571
King of the Jungle | Genre: Thriller | Year: 2000 | Rating: 5.9 | ID: 8821197d-d00b-4996-bd95-b25a8414e415
Major League II | Genre: Sport | Year: 1994 | Rating: 5.6 | ID: 08e4c27-4357-4d09-905a-ad5ca4a47951
Hilly May, The (The Vole lactée, La) | Genre: Drama | Year: 1969 | Rating: 7.5 | ID: 56af4e59-b76c-45b7-89da-acdbaa5352f6
Lake Placid | Genre: Horror | Year: 1999 | Rating: 5.7 | ID: 503a0d2c-510b-407f-b46c-1af9c9e30eb21
Manhattan | Genre: Drama | Year: 2014 | Rating: 7.8 | ID: 09f1c13b-2d8c-4f5c-b58c-4c767898b0d0
Apostle, The | Genre: Drama | Year: 1997 | Rating: 7.2 | ID: 4e3286c1-0c15-4789-b0ba-497eb0e7e0f1
Mighty Aphrodite | Genre: Comedy | Year: 1995 | Rating: 7.0 | ID: 36a1a281-c803-4542-a1a1-d0ee056cc061
Trans-Surop-Express | Genre: Thriller | Year: 1990 | Rating: 7.1 | ID: 97f0ba21-4709-4e33-a049-d1d0b14a9e0e
Moon | Genre: Drama | Year: 2009 | Rating: 7.8 | ID: 8a7c5833-7261-4db7-a67c-dbe908f17c7b
Once You're Born You Can No Longer Hide (Quando sei nato non puoi più nasconderti) | Genre: Adventure | Year: 2005 | Rating: 6.7 | ID: 925c357c-3e55-47ad-8407-9054541f378a
Sommer der Goulkier, Der | Genre: Comedy | Year: 1991 | Rating: 6.1 | ID: 36041a7c-f534-4a63-9704-ffc7243107d0
Tibet: Cry of the Snow Lion | Genre: Documentary | Year: 2002 | Rating: 7.6 | ID: ad0df84e-5f4e-420a-ba4e-cb3a54f8277d
Night of the Comet | Genre: Sci-Fi | Year: 1984 | Rating: 6.4 | ID: f108776f-cce4-4e0e-b05c-50d6e55c8ff1
Hell Mary (Je vous salue, Marie) | Genre: Drama | Year: 1985 | Rating: 6.5 | ID: 4eba9791-9ed7-49f9-98b5-6bb3aa87f529
Executive Suite | Genre: Drama | Year: 1954 | Rating: 7.4 | ID: 8ec5d0d3-deec-4821-8192-b915ceca04720
Crying Out Love in the Center of the World (Gekai no chûshin de, ai o sakeba) | Genre: Drama | Year: 2004 | Rating: 7.3 | ID: e05c824b-7336-4f69-8744-fa04fcf2f5f0
The Butterfly Collector | Genre: Mystery | Year: 2021 | Rating: 8.0 | ID: 96cca933-7ccc-4c35-a0aa-890608779122
Fantomas (Fantômas: L'ombre de la guillotine) | Genre: Crime | Year: 1904 | Rating: 7.0 | ID: aa7894ad-54fe-42a1-a190-005aae58f05a
Day of the Dead | Genre: Horror | Year: 1985 | Rating: 7.1 | ID: 4e774c32-a719-42b1-9a49-7a095f87c56d
Justice League: Throne of Atlantis | Genre: Animation | Year: 2015 | Rating: 6.7 | ID: 7677ff03-a151-461f-8c99-5be013a3c741
Raisin in the Sun, A | Genre: Drama | Year: 1961 | Rating: 8.8 | ID: 43d7249f-8d15-4871-9145-c4747c78c5f4
Like Stars on Earth (Qare Zameen par) | Genre: Drama | Year: 2007 | Rating: 8.4 | ID: 32cbe77a-b0ed-4e7a-960f-ca185079fa0b
Lonelyhearts | Genre: Drama | Year: 1958 | Rating: 6.7 | ID: 6d60dd1d-0098-4772-86bb-7e996716cac2
Juror, The | Genre: Thriller | Year: 1990 | Rating: 5.7 | ID: 8ca855d4-5f73-4d55-adc1-73f9d02025d6
Robot & Frank | Genre: Sci-Fi | Year: 2012 | Rating: 7 | ID: 803c1f5c-2c4f-4372-9a58-e92110b0bb42
Slumber Party '57 | Genre: Drama | Year: 1976 | Rating: 4.1 | ID: c88e050a-eba5-42e2-9e68-f9c3f31b2556
Valmont | Genre: Romance | Year: 1989 | Rating: 7.0 | ID: b736443d-78a0-4993-ac24-a84bb063206
Chicken Little | Genre: Animation | Year: 2005 | Rating: 5.7 | ID: 5204b799-4b5e-4e91-be31-6e62fcb9a96f
Earthlings | Genre: Documentary | Year: 2005 | Rating: 8.7 | ID: 820981fe-df8c-4211-8dac-750c0773faa
Angel and the Badman | Genre: Western | Year: 1947 | Rating: 6.9 | ID: 45c8d592-f073-4bca-9f0c-a40381f49380
Lovely Bones, The | Genre: Drama | Year: 2009 | Rating: 6.7 | ID: 8127ee42-c0ac-4f02-b401-0baad567f001
The Gunman | Genre: Action | Year: 2015 | Rating: 5.8 | ID: af0db772-ed2b-4e0f-a28d-c66452277c85
Grapes of Death, The (Raisin de la mort, Les) | Genre: Horror | Year: 1978 | Rating: 6.1 | ID: fba5558f-5413-451b-807b-91fd205f040a
Tequila Sunrise | Genre: Thriller | Year: 1988 | Rating: 6.1 | ID: 47d0016d-e459-4272-ae0f-bea04f6e3285
The Confessions of Bernhard Goetz | Genre: Documentary | Year: 1987 | Rating: 7.7 | ID: 7ef813d1-cb1f-4096-a897-4aac92db299a
V for Vendetta | Genre: Action | Year: 2005 | Rating: 8.1 | ID: 3d268f73-209e-440b-4239-b0b5803bc200
Hard to Kill | Genre: Action | Year: 1990 | Rating: 5.8 | ID: 62cc66b8-cd41-473c-8896-4fa39423d064

```

Figure 8: Original data screen 2

3.3 Adding some new data

Now, it is time to change things in the database. Lets start with adding some new data. First, I created a new method named `Data_Adder`, that will be able to add new movies to the list (figure 9). Then, i'm using it in the main program (figure 10). I'm adding *Prend la ciboulette et tire toi*, an amateur film made by JDG in 2016, and i made it a Drama, with a Rating of 5.0. i also gave it an ID in hexadecimal that does not correspond to an other film in the list. As we can see, it appears at the

```
def Data_Adder(self,Table : str ,Column_List : str ,data): #to add data to the Table

    Column_Number = ""# calculate the number of the column. this part of the code can be used for an
    for i in range(0,len(Column_List.split(',') - 1 ,1) :
        Column_Number = Column_Number + ("?,")
    Column_Number = Column_Number + ("?")

    request = 'INSERT INTO ' + Table + ' ( ' + Column_List + ' ) VALUES ( ' + Column_Number + ' )'#pu
    self.cur.execute(request, data)
    self.db.commit()
```

Figure 9: the method of the data adder

```
print("\n Part 1 : Adding Data \n")
Test_DB.Data_Adder("noovies","FilmName,Year,Genre,Rating,ID",("prend la ciboulette et tire toi",2016,"Drama",5.0,"aaca0baa-0faa-4daa-aa28-aaae86faaf6" ) )
Test_DB.Print_Data_Table("*","noovies")
```

Figure 10: adding data in the main program

```
FilmName : Valmont | Genre : Romance | Year : 1989 | Rating : 7.0 | ID : b736443d-78a0-4993-ac24-a84bbb8632d0
FilmName : Chicken Little | Genre : Animation | Year : 2005 | Rating : 5.7 | ID : 5024bf99-485e-4e91-be31-66e2fc8a946f
FilmName : Earthlings | Genre : Documentary | Year : 2005 | Rating : 8.7 | ID : 820981fe-df8c-4211-8dac-750c69773faa
FilmName : Angel and the Badman | Genre : Western | Year : 1947 | Rating : 6.9 | ID : a5c8d592-f673-4bc8-9fco-a40381f49388
FilmName : Lovely Bones, The | Genre : Drama | Year : 2009 | Rating : 6.7 | ID : 8127ee42-c0ac-4f02-b401-a9aad2d2f0b1
FilmName : The Gunman | Genre : Action | Year : 2015 | Rating : 5.8 | ID : af0db772-ed2b-4e9f-a20d-cd0452277c85
FilmName : Grapes of Death, The (Raisins de la mort, Les) | Genre : Horror | Year : 1978 | Rating : 6.1 | ID : f0a5558f-5413-45fb-807b-91fd285f046a
FilmName : Tequila Sunrise | Genre : Thriller | Year : 1988 | Rating : 6.1 | ID : d7db616d-e459-4272-aeef-8e4d4b4fe5285
FilmName : The Confessions of Bernhard Goetz | Genre : Documentary | Year : 1987 | Rating : 7.7 | ID : 7ef83c1d-cb1f-4096-a897-4aa6c92db29a
FilmName : V for Vendetta | Genre : Action | Year : 2005 | Rating : 8.1 | ID : 3d286f73-2e9e-44b0-a239-bb05a83bc3d0
FilmName : Hard to Kill | Genre : Action | Year : 1990 | Rating : 5.8 | ID : 62c6c66b-cd41-473c-8896-4fa39423d0d4
FilmName : prend la ciboulette et tire toi | Genre : Drama | Year : 2016 | Rating : 5.0 | ID : aaca0baa-0faa-4daa-aa28-aaae86faaf6
```

Figure 11: adding "prend la ciboulette et tire toi"

end of the list in figure 11, so the adding is successful.

3.4 Updating some records

In this part, i will update 20 records.

But First, lets start with the creation of a method that can help me to modify data. Many methods exists in sql to modify data, but the one that i will use here is with `UPDATE Table SET new data WHERE conditions` for the new data (figure 12).

```
def Data_Updater(self, Table : str , New_Data : str , Modif_Condition : str):# to update 1 t)

    self.cur.execute("UPDATE " + Table + " SET " + New_Data + " WHERE " + Modif_Condition)
    self.db.commit()
```

Figure 12: creating the method `Data_Updater`

Then i'm gonna use this methods in few different ways in order to modify 20 records.

The first update is changing a movie's name (so it's a 1 record change). in the figure 13, we can see that i modified the name of the film *5x2* and replaced it with *La Boucherie Martin*. The modification can be seen on figure 14.


```

print("\n Part 2 : Updating Data \n")
#first update : changing movie name (1 record change)
Test_DB.Data_Updater("moovies","ID = '1219e67a-bfe3-4893-8a0f-ddd09a6fffff',FilmName = 'La Boucherie Martin'", "FilmName = '5x2'")#
#second update : changig Genre Horror to Comedy (10 records changed)
Test_DB.Data_Updater("moovies","Genre = 'Comedy'", "Genre = 'Horror'")# update some data
#third update : changing Rating of animations films (4 records changed)
Test_DB.Data_Updater("moovies","Rating = 8.5", "Genre = 'Animation'")# update some data
#fourth update : making all films from 2012 Fantasy films (5 records)
Test_DB.Data_Updater("moovies","Genre = 'Fantasy'", "Year = 2012")# update some data
Test_DB.Print_Data_Table("","moovies")

```

Figure 13: Using the data updater in different ways through the main program

The second update is changing the Genre of Horror movies to Comedy. It has changed 10 records because 10 of them were at the start Horror movies. Results can be observed on figures 14 and 15. The third update is changing Rating of animations films. Here, there are 4 animations movies, so all of them given a rating of 8.5 (figure 13). Results are visible on figures 14 and 15. The last update was about making all films from 2012 Fantasy films. like the others, here we have 5 films from 2012, and all of them has been turned into Fantasy movies.

```

Part 2 : Updating Data
FilmName: Crazy/Beautiful | Genre: Drama | Year: 2001 | Rating: 6.4 | ID: 8a0f2cbf-3f4f-4e54-b15f-1ff51a978604
FilmName: Crissan Tide | Genre: Drama | Year: 1995 | Rating: 7.3 | ID: 58f12446-68c1-4d1b-b7e5-bd2cf81923ba
FilmName: Me and Orson Welles | Genre: Drama | Year: 2008 | Rating: 6.7 | ID: 7778e123-3149-412b-9ffc-d45f880c360d
FilmName: Mask of Fu Manchu, The | Genre: Adventure | Year: 1932 | Rating: 6.3 | ID: b555cb39-2a3f-4d2b-8d6c-20ea2394bcd3
FilmName: Woman in Black, The | Genre: Fantasy | Year: 2012 | Rating: 6.4 | ID: f0a794ac-4f3a-413b-91d3-421cc8a4d6e7
FilmName: Home Alone: The Holiday Heist | Genre: Fantasy | Year: 2012 | Rating: 3.5 | ID: 78c50b35-0f94-4d17-932b-838e80f311f6
FilmName: Sada | Genre: Drama | Year: 1998 | Rating: 6.6 | ID: 5a1cad71-8645-4a2e-9bb1-e056dfc56f8a
FilmName: Blind | Genre: Drama | Year: 2016 | Rating: 5.8 | ID: 4ccbf82a-1509-4d65-8a1e-e2c39ebdb121
FilmName: Digging Up the Marrow | Genre: Comedy | Year: 2014 | Rating: 5.8 | ID: cbaae4d2-ffff-43ae-a227-1c0510daf4cd
FilmName: Travtata, La | Genre: Musical | Year: 1982 | Rating: 7.2 | ID: c90ed015-f075-4e80-885c-db1860b40d3f
FilmName: Heathers | Genre: Comedy | Year: 1988 | Rating: 7.2 | ID: 16a4fe07-1806-43bc-bbde-dc4cd8e417d9
FilmName: Fright Night Part II | Genre: Comedy | Year: 1988 | Rating: 5.9 | ID: 4249a354-5180-40b9-8154-da9f33f8a22d
FilmName: Hawks and Sparrows (Uccellacci e Uccellini) | Genre: Comedy | Year: 1966 | Rating: 7.3 | ID: 6e43c104-1ce8-4d8d-95f1-fc2a27569ef6
FilmName: Kind Lady | Genre: Crime | Year: 1951 | Rating: 7.0 | ID: eeb8f642-3e50-4dfe-9e38-c16d3a32c03
FilmName: Decoy Bride, The | Genre: Comedy | Year: 2011 | Rating: 6.2 | ID: 57916454-cb4b-4272-b2f7-dbd18659c4a
FilmName: Daughter of Dr. Jekyll | Genre: Comedy | Year: 1972 | Rating: 4.8 | ID: 2290d0f-07c3-4ee2-8d78-d0b8f6b130c
FilmName: Hunter, The | Genre: Thriller | Year: 2011 | Rating: 6.7 | ID: 44f0a751-3d4e-4f1a-ec22-5e11cd764386
FilmName: Annapolis | Genre: Drama | Year: 2006 | Rating: 5.9 | ID: 93e82922-2cea-43ba-a364-d053602c40bb
FilmName: 51 Birch Street | Genre: Documentary | Year: 2005 | Rating: 7.2 | ID: 48d378ce-5366-4e71-9b45-546d795df074
FilmName: Beyond Tomorrow (Beyond Christmas) | Genre: Romance | Year: 1948 | Rating: 6.5 | ID: 76d6d26-95bb-4ccd-a9d4-1616fb9cad93
FilmName: Mondo Trasho | Genre: Comedy | Year: 1969 | Rating: 6.2 | ID: d674e26e-74f8-4041-905e-fc2441b34cd5
FilmName: Palo Alto | Genre: Drama | Year: 2013 | Rating: 6.2 | ID: 26bfc3da-df01-4043-becf-26e419ec140d
FilmName: Motel, The | Genre: Comedy | Year: 2005 | Rating: 6.7 | ID: 63c27f28-abda-44ed-8984-b6893023a063
FilmName: Terrorstorm: A History of Government-Sponsored Terrorism | Genre: Documentary | Year: 2003 | Rating: 6.8 | ID: 6536c073-f45d-420b-879b-4e459aecdccf6
FilmName: Nothing About Robert (Rien sur Robert) | Genre: Comedy | Year: 1999 | Rating: 6.4 | ID: 6aa92ae9-e1f4-4f63-9090-fe0858e4b9dc
FilmName: Sky Murder | Genre: Mystery | Year: 1948 | Rating: 6.0 | ID: bdb21023-cf8b-4d8c-8b33-1a8e1216d44
FilmName: Very Brady Sequel, A | Genre: Comedy | Year: 1996 | Rating: 5.8 | ID: ddf75622-e966-4a46-8f96-71f46c24afcd
FilmName: Must Have Been Love | Genre: Fantasy | Year: 2012 | Rating: 5.7 | ID: 4ac81d97-3b9c-48fb-ba22-2933d572a3dd
FilmName: Ninja Scroll (Cubet ninpûchô) | Genre: Animation | Year: 1993 | Rating: 8.5 | ID: 833ba779-55f5-440b-9b22-4852087b2654
FilmName: Germany Pale Mother | Genre: War | Year: 1980 | Rating: 7.2 | ID: e4197d11-e373-4d0b-99cc-965f1d111908
FilmName: La Boucherie Martin | Genre: Romance | Year: 2004 | Rating: 6.6 | ID: 1219e67a-bfe3-4893-8a0f-ddd09a6fffff
FilmName: Pear Tree, The (Derahite golati) | Genre: Drama | Year: 1998 | Rating: 7.5 | ID: c5017b8c-4c56-4821-afb4-2a8cd4ff721e
FilmName: S.W.A.T. | Genre: Action | Year: 2017 | Rating: 7.1 | ID: ba1ff53c-2273-4807-807a-17d0f5f0810b
FilmName: Brooklyn Castle | Genre: Fantasy | Year: 2012 | Rating: 7.2 | ID: b82a9c6a-61d5-4bca-43e4-2039b009373d
FilmName: K-PAX | Genre: Sci-Fi | Year: 2001 | Rating: 7.4 | ID: 3a2e3475-ad10-4652-9521-c3e80822b0c9
FilmName: In Transit | Genre: War | Year: 2008 | Rating: 5.8 | ID: 1d9e495e-b16f-47e0-967f-4622bb1ca166
FilmName: Vampire Hunter D: Bloodlust (Banpala hantô D) | Genre: Animation | Year: 2000 | Rating: 8.5 | ID: a455911f-0032-4547-a000-a907cc531087
FilmName: Ninja Hattori Gattai Les Vikings de l'Espace | Genre: Sci-Fi | Year: 2016 | Rating: 9.6 | ID: 8f6a8cd7-107f-487b-a990-80b514eb6e74
FilmName: Last Hangover, The (Pierspolini) | Genre: Drama | Year: 2005 | Rating: 7.4 | ID: 8490696a-361b-4ad7-9601-c771224f9c11
FilmName: Capricious Summer (Roznarné léto) | Genre: Comedy | Year: 1968 | Rating: 7.0 | ID: c7e5cd3c-456b-43ba-ba5c-01099741862a
FilmName: Heaven & Earth | Genre: Musical | Year: 2021 | Rating: 5.0 | ID: 177e7604-2c2b-4f67-9b0f-6e44f8aa5813
FilmName: Mad Dogs & Englishmen | Genre: Drama | Year: 2009 | Rating: 7.2 | ID: 23b1b0c7-338c-4801-9e7e-3ff31d7b7945
FilmName: Gas, Food, Lodging | Genre: Romance | Year: 1992 | Rating: 6.6 | ID: bc17b601-32d8-4d7d-967f-5317e9763a0c
FilmName: Normal People | Genre: Drama | Year: 2020 | Rating: 8.5 | ID: 2d6b8bee-9d43-442c-9f4b-cf7d7047a65c
FilmName: Lady in Red, The | Genre: Action | Year: 1979 | Rating: 6.2 | ID: Ba11aid-32f5-4975-af4a-6013d2f533a8
FilmName: Resistance | Genre: Drama | Year: 2019 | Rating: 7.4 | ID: 36bdfcc2-8dda-4d6e-3d3a-8554c1cf1b14
FilmName: Secret Sunshine (밀양) | Genre: Drama | Year: 2007 | Rating: 7.5 | ID: 6ae38097-75b6-4f39-bcae-f23654fb6697
FilmName: Look Back in Anger | Genre: Drama | Year: 1959 | Rating: 7.0 | ID: ed680abd-7475-43fd-a990-425baa2519fb
FilmName: Oray of the Dead | Genre: Comedy | Year: 1965 | Rating: 3.0 | ID: 1d6c388e-44d5-427f-9407-01b7feac0a65

```

Figure 14: Modified database part 1

As we can see, we can choose the condition that we want and modify it the way we like. It is possible to modify 1 or more records at the same time, if they all have a common data.

```
Orgy of the Dead | Genre: Comedy | Year: 1965 | Rating: 3.8 | ID: 1d8c383e-4d05-427f-9407-01b7feacc905
Brice Man, The (Brice de Nice) | Genre: Comedy | Year: 2005 | Rating: 5.1 | ID: 6c9321d5-52dd-4b35-b67b-689e91c4f815
Jourd of Desperation (Nisskshon torizash) | Genre: Action | Year: 2010 | Rating: 7.2 | ID: 491312db-d616-4fb7-a854-82a0a43e9e11
Harley & Me: The Puppy Years | Genre: Children | Year: 2011 | Rating: 3.5 | ID: 50e4c9e0-f523-421c-81a6-48bfff6f1027
Singapore Sling (Singapore sling: O anthropos pou agapise ena ptoma) | Genre: Comedy | Year: 1990 | Rating: 6.5 | ID: 89762913-3642-4a21-a959-338f6785673e
Love Beats Rhymes | Genre: Drama | Year: 2017 | Rating: 5.5 | ID: 4c8c3295-d795-4b5a-ab5e-13b7f8f0cf33
High Risk | Genre: Action | Year: 1999 | Rating: 6.1 | ID: 8bf9e672-e123-40bd-a030-03a90a0134aa
Darkest Hour, The | Genre: Comedy | Year: 2011 | Rating: 4.9 | ID: e6793ede-473b-4dd1-b466-bd6ef7366564
The New Year Herman Show on Broadway | Genre: Comedy | Year: 2011 | Rating: 7.8 | ID: ab0e72a2-9ed3-4a0e-84c0-24f848fd6c84
Dog Problem, The | Genre: Comedy | Year: 2006 | Rating: 6.2 | ID: 5981490-0c0b-43f0-9370-9fa1c978b404
Baudouin Rind, A | Genre: Drama | Year: 2001 | Rating: 8.2 | ID: 18f18c24-f520-4704-a029-a8a0b62bdc9c
Miss Météo | Genre: Comedy | Year: 2005 | Rating: 6.1 | ID: 4a0fa5a8-3eb3-4c07-9f5a-50705492aena
Forced Vengeance | Genre: Adventure | Year: 1982 | Rating: 5.8 | ID: 95098aac-ed17-4dec-a807-c0feae920291
District 13: Ultimatum (Banlieue 13 - Ultimatum) | Genre: Action | Year: 2009 | Rating: 6.5 | ID: 8715800b-fb14-49c4-838e-bdd3e1e4a571
King of the Jungle | Genre: Thriller | Year: 2000 | Rating: 5.9 | ID: 882197d-d0b0-4990-bd95-b21a841eae15
Major League II | Genre: Comedy | Year: 1994 | Rating: 5.9 | ID: 88e4c2c7-d537-40d0-9b5a-ade5dca41515
Milkly Way, The (Voie lactée, La) | Genre: Drama | Year: 1969 | Rating: 7.5 | ID: 56af4e59-b76c-45b7-89da-acdbaa55352f6
Lake Placid | Genre: Comedy | Year: 1999 | Rating: 5.7 | ID: 583a082c-510b-407f-b4ac-laf90e5b0b21
Vanhattan | Genre: Drama | Year: 2014 | Rating: 7.8 | ID: 89f1813b-2d8c-41ec-b30c-4c78d76b0b01
Apostle, The | Genre: Drama | Year: 1997 | Rating: 7.2 | ID: 4e3286c1-8c15-4789-b6ba-497e6e7e0ff1
Mighty Aphrodite | Genre: Comedy | Year: 1995 | Rating: 7.6 | ID: 3631a091-c803-4542-aad0-d0e605c0c091
Trans-Europ-Express | Genre: Thriller | Year: 1966 | Rating: 7.1 | ID: 977b0a31-4799-4e33-a94b-01c0db1a49e8e
Moon | Genre: Drama | Year: 2009 | Rating: 7.8 | ID: 8a7c5833-7261-4d07-a07c-dbe908f17c7b
Once You're Born You Can No Longer Hide (Quando sei nato non puoi più nasconderti) | Genre: Adventure | Year: 2005 | Rating: 6.7 | ID: 925c337c-3e55-47ad-8487-9054541f378a
Sonner der Gaukler, Der | Genre: Comedy | Year: 2011 | Rating: 6.1 | ID: 36041a7c-b334-4ec2-a704-ffc7243167d0
Tibet: Cry of the Snow Lion | Genre: Documentary | Year: 2002 | Rating: 7.6 | ID: add88f4e-5f46-42ba-b44e-cb3a54f8277d
Night of the Comet | Genre: Sci-Fi | Year: 1984 | Rating: 6.4 | ID: 77a8770f-cea1-4a0e-b865-5d0c8e55c8ff
Hall Mary ("Je vous salue, Marie") | Genre: Drama | Year: 1985 | Rating: 6.5 | ID: 4eb9791-9ed7-49f9-98b5-ebb3aa87f529
Executive Suite | Genre: Drama | Year: 1954 | Rating: 7.4 | ID: 8ed5603-0ee0-4021-8192-0950c0e0a720
Crying Out Love in the Center of the World (Sokod no chushin de, Ai o sakebu) | Genre: Drama | Year: 2004 | Rating: 7.3 | ID: e05c824b-7330-4f69-8744-fa04f0cf2f50
The Butterfly Collector: The Red Room | Genre: Mystery | Year: 2021 | Rating: 8.0 | ID: 96cc933-7cc6-4c35-adaa-890808779122
Fantomas (Fantômas - L'homme de la guillotine) | Genre: Crime | Year: 1964 | Rating: 7.0 | ID: aax99a4d-54fe-42a1-a130-003ae58fda5a
Day of the Dead | Genre: Comedy | Year: 1985 | Rating: 7.1 | ID: 4e774c32-a719-41b1-94a9-7a895d7ec5d0
Justice League: Throne of Atlantis | Genre: Animation | Year: 2015 | Rating: 6.5 | ID: 7677ff03-a151-461f-bc99-5be013a3c741
Baisin in the Sun, A | Genre: Drama | Year: 1961 | Rating: 8.8 | ID: 43b7240f-9d55-4071-9145-c747c178c6f6
Like Stars on Earth (Taare Zameen Par) | Genre: Drama | Year: 2007 | Rating: 8.4 | ID: 32cb778-0b8d-4e7a-960f-ca185079fa6b
Lonelyhearts | Genre: Drama | Year: 1958 | Rating: 6.7 | ID: 4d60d6d1-0696-4772-b6b0-76998726ac2c
Juror, The | Genre: Thriller | Year: 1996 | Rating: 5.7 | ID: 8ca855d4-5f73-4a55-adc1-73f9d62025d6
Robot & Frank | Genre: Fantasy | Year: 2012 | Rating: 7 | ID: 083c3f5c-2c4f-4372-9a58-e92110bb5b42
Slumber Party '57 | Genre: Drama | Year: 1976 | Rating: 4.1 | ID: c16ed50a-e8a3-42a2-9a68-f9c1f3112556
Valmont | Genre: Romance | Year: 1989 | Rating: 7.0 | ID: b736443d-78a0-4993-ac24-a8d4bb803209
Chicken! | Genre: Animation | Year: 2005 | Rating: 8.5 | ID: 002b0f99-480e-4e91-ba31-d6e2fca0a04f
Earthlings | Genre: Documentary | Year: 2005 | Rating: 8.7 | ID: 820991fe-df8c-4211-8d4c-79cc09773faa
Angel and the Badman | Genre: Western | Year: 1947 | Rating: 6.9 | ID: a5cd592-7673-4b0c-9f0c-a00381f49388
Lovely Jones, The | Genre: Drama | Year: 2009 | Rating: 6.7 | ID: 8127e42e-c9ac-4f62-ba01-a9a0d22f0d1
The Gunman | Genre: Action | Year: 2015 | Rating: 5.8 | ID: af60b772-ed2b-4e9f-a28d-c0452272c85
Grapes of Death, The (Raisins de la mort, Les) | Genre: Comedy | Year: 1978 | Rating: 6.1 | ID: f9a5558f-5413-45fb-807b-91fd0205f04a
Tequila Sunrise | Genre: Thriller | Year: 1988 | Rating: 6.1 | ID: d70b61ed-ea59-4272-aeef-bea4baf5e285
The Confessions of Bernhard Goetz | Genre: Documentary | Year: 1987 | Rating: 7.7 | ID: 7ef83cid-cb1f-4096-a897-4aadc92db29a
V for Vendetta | Genre: Action | Year: 2005 | Rating: 8.1 | ID: 3d2d6f73-2e9e-4d80-a239-bbb0a830c340
Hard to Kill | Genre: Action | Year: 1990 | Rating: 5.8 | ID: 62c6c00b-cd41-473c-8896-4fa39423b0d4
prend la ctiboulette et tire tot | Genre: Drama | Year: 2016 | Rating: 5.0 | ID: aac0baa-0faa-4daa-a228-aaae8d6faaaf0
```

Figure 15: Modified database part 2

3.5 Deleting records

It's time to erase some data. So, we can start by creating a method to delete records with a condition. That is how the DATA_Eraser has been made (figure 16). Then, i will delete 10 records, bases on different conditions.

The first film that has been erased is the one named *the Motel*. Then, because i don't appreciate thrillers movies, i will erase all of them. This action erased 5 records. I can also erase films using their Rating as a condition. For instance, with the rating 5.9, i erased 3 records. The last record that erased has been a chosen one, because i've put the exact ID of this film, that of course cannot correspond to another record (figure 17). All those erased data can't be seen in figures 18 and 19 because of course, they have been erased. but we can see that the data list have been lightened.

```
def Data_Eraser(self, Table : str , Modif_Condition : str):

    self.cur.execute("DELETE FROM " + Table + " WHERE " + Modif_Condition)
    self.db.commit()
```

Figure 16: creating the method Data_Eraser

```
print("\n Part 3 : Deleting Data \n")
#deleting 1 film by name
Test_DB.Data_Eraser("moovies","FilmName = 'Motel, The'")
#deleting by genre (5 movies)
Test_DB.Data_Eraser("moovies","Genre = 'Thriller'")
#deleting by rating (3 movies)
Test_DB.Data_Eraser("moovies","Rating = 5.9")
#deleting by ID (1 movie)
Test_DB.Data_Eraser("moovies","ID = '32cb778-0b8d-4e7a-960f-ca185079fa6b'")
Test_DB.Print_Data_Table("*","moovies")
```

Figure 17: Using the data eraser in different ways through the main program


```

Part 3 : Deleting Data
FilmName | Crazy/Beautiful | Genre : Drama | Year : 2001 | Rating : 6.4 | ID : 8a6f2cbf-3f4f-4e54-b15f-1ff51a978604
FilmName | Crinoline Tide | Genre : Drama | Year : 1995 | Rating : 7.3 | ID : 58f12446-6d81-40b3-b7e5-b62cfb91e3ba
FilmName | He and Orion Welles | Genre : Drama | Year : 2008 | Rating : 6.7 | ID : 777a123-314e-432b-91fc-d45f880c36d0
FilmName | Mask of Fu Manchu, The | Genre : Adventure | Year : 1932 | Rating : 6.3 | ID : b555cb39-2a3f-4d2b-bd6c-20ea2394bcd3
FilmName | Woman in Black, The | Genre : Fantasy | Year : 2012 | Rating : 6.4 | ID : f0a7946c-4f3a-41bb-9133-428cab4406e7
FilmName | Home Alone: The Holiday Heist | Genre : Fantasy | Year : 2012 | Rating : 6.5 | ID : 78c5b035-0f94-4d17-9328-838e06f311f6
FilmName | Sada | Genre : Drama | Year : 1998 | Rating : 6.6 | ID : 5a1cad71-8645-4a2e-9bb1-e56d6fc50f8a
FilmName | Blind | Genre : Drama | Year : 2016 | Rating : 5.8 | ID : 4ccb8f2a-5509-4665-8a5e-e2c39ebbb142
FilmName | Digging up the marrow | Genre : Comedy | Year : 2014 | Rating : 5.8 | ID : cbaa64d2-ffff-43ae-a227-1c0510daf4cd
FilmName | Travlato, La | Genre : Musical | Year : 1982 | Rating : 7.2 | ID : c9aedc15-f075-4eab-885c-d01a86eb4d3f
FilmName | Heathers | Genre : Comedy | Year : 1988 | Rating : 7.2 | ID : 10a4fee7-18b6-438c-bbde-d4cd8e041749
FilmName | Hawks and Sparrows (Uccellacci e Uccellini) | Genre : Comedy | Year : 1966 | Rating : 7.3 | ID : 6e43c104-1ce8-4d8d-9f51-fc272569e7e6
FilmName | Kind Lady | Genre : Crime | Year : 1951 | Rating : 7.0 | ID : eee8fef4-3e58-4b7e-9c3b-cdd6d1323e03
FilmName | Decoy Bride, The | Genre : Comedy | Year : 2011 | Rating : 6.2 | ID : 57916454-cb4b-4272-bb2f-bd0d10659c4a
FilmName | Daughter of Dr. Jekyll | Genre : Comedy | Year : 1972 | Rating : 4.8 | ID : 22900d0f-07c3-4ee2-8d78-6dbb8f6b136c
FilmName | 51 Birch Street | Genre : Documentary | Year : 2005 | Rating : 7.2 | ID : 48d378ce-536e-4e71-9b45-546d795d5f07a
FilmName | Beyond Tomorrow (Beyond Christmas) | Genre : Romance | Year : 1940 | Rating : 6.5 | ID : 76d8b2c6-933b-4ccc-a9d4-1616fb9cad93
FilmName | Mondo Trasho | Genre : Comedy | Year : 1969 | Rating : 6.2 | ID : d674e20e-74f8-4041-985e-fc2441b34cd5
FilmName | Palo Alto | Genre : Drama | Year : 2013 | Rating : 6.2 | ID : 26bfc3da-df01-4043-8ecf-26e419ec140d
FilmName | Terrorstorm: A History of Government-Sponsored Terrorism | Genre : Documentary | Year : 2003 | Rating : 6.8 | ID : 6536c073-f45d-420b-879b-4e459aedc6fe
FilmName | Nothing About Robert (Rien sur Robert) | Genre : Comedy | Year : 1999 | Rating : 6.4 | ID : 6aa92e69-e1f4-4f63-9090-fe0858e4b9dc
FilmName | Sky Murder | Genre : Mystery | Year : 1940 | Rating : 6.0 | ID : bdb21023-cf0b-4d8c-a3b3-1a8ac1216d44
FilmName | Very Brady Sequel, A | Genre : Comedy | Year : 1996 | Rating : 5.8 | ID : ddf75622-e96e-44d6-8f96-71f46c24afcd
FilmName | Must Have Been Love | Genre : Fantasy | Year : 2012 | Rating : 5.7 | ID : 4ac81d97-309c-4870-8a22-2933d572a3dd
FilmName | Ninja Scroll (Jûbei ninpûchô) | Genre : Animation | Year : 1993 | Rating : 8.5 | ID : 033ba779-55f5-44ab-9b22-4852087b2654
FilmName | Germany Pale Mother | Genre : War | Year : 1980 | Rating : 7.2 | ID : e4197d1d-e373-4d0b-99cc-965f1d11908
FilmName | La Boucherte Martin | Genre : Romance | Year : 2004 | Rating : 6.6 | ID : 1219e07e-bf63-4093-8a0f-ddd89a6effff
FilmName | Pear Tree, The (Der perfekte Goliath) | Genre : Drama | Year : 1998 | Rating : 7.5 | ID : cb017b0c-4c5e-4821-af04-2a0cd4ff211e
FilmName | S.W.A.T. | Genre : Action | Year : 2017 | Rating : 7.1 | ID : ba1ff35c-2273-4807-807a-17d0f5f0810b
FilmName | Brooklyn Castle | Genre : Fantasy | Year : 2012 | Rating : 7.2 | ID : b82a9c6a-61d5-40c4-43e4-203b9069373d
FilmName | K-PAX | Genre : Sci-Fi | Year : 2001 | Rating : 7.4 | ID : 3e2c8475-ad19-483c-952c-2c080220e34a
FilmName | In Transit | Genre : War | Year : 2008 | Rating : 5.8 | ID : 1d90495e-b1ef-47ee-967f-4622bb1ca166
FilmName | Vampire Hunter D: Bloodlust (Banpaia hantô D) | Genre : Animation | Year : 2008 | Rating : 8.5 | ID : ad55911f-0032-4547-a000-a907ccc31087
FilmName | Ninja Hitler Contre Les Vikings De l'espace | Genre : Sci-Fi | Year : 2016 | Rating : 9.6 | ID : 8f6a8dcf-107f-407e-a990-80b514be0674
FilmName | Last Hangan, The (Pierpoint) | Genre : Drama | Year : 2005 | Rating : 7.4 | ID : 0490896a-361b-4ad7-9603-c771224f3dc1
FilmName | Capricious Summer (Roznarné léto) | Genre : Comedy | Year : 1968 | Rating : 7.0 | ID : c7e5cd3c-450b-43ba-abc5-01099741862a
FilmName | Mad Dogs & Englishmen | Genre : Musical | Year : 2021 | Rating : 5.0 | ID : dca08528-b960-4551-aceb-cde08a27e06d
FilmName | Crazy Heart | Genre : Romance | Year : 2009 | Rating : 7.2 | ID : 23b1bb67-310c-4001-9e7e-3ff31d7b7945
FilmName | Gas, Food, Lodging | Genre : Romance | Year : 1992 | Rating : 6.6 | ID : bc17ba01-32d8-4d7d-96f7-5317e9703a0c
FilmName | Heaven & Earth | Genre : Action | Year : 1998 | Rating : 7.0 | ID : 17fe7604-2c2b-4fe7-9b0f-6444fa8a5813
FilmName | Normal People | Genre : Drama | Year : 2020 | Rating : 8.5 | ID : 2d0b0be6-6da3-442e-9f4b-cf77047a063c
FilmName | Lady in Red, The | Genre : Action | Year : 1979 | Rating : 6.2 | ID : 8a111a1d-32f5-4975-af4e-6013d2f533ab
FilmName | Resistance | Genre : Drama | Year : 2019 | Rating : 7.4 | ID : 36bdffc2-bdda-4de6-9d34-a554c1cf1b14
FilmName | Secret Sunshine (밀양) | Genre : Drama | Year : 2007 | Rating : 7.5 | ID : c0e5800f-75be-4f39-bca6-f23654fb6097
FilmName | Look Back in Anger | Genre : Drama | Year : 1959 | Rating : 7.0 | ID : ed68a77e-7475-43ff-a990-425baa2519f6
FilmName | Orgy of the Dead | Genre : Comedy | Year : 1965 | Rating : 3.0 | ID : 1d4c383e-4a05-427f-9a07-01b7feacab95
FilmName | Brice Man, The (Brice de Nice) | Genre : Comedy | Year : 2005 | Rating : 5.1 | ID : 6c823d15-52dd-4b55-80fb-689e01c4f815
FilmName | Sword of Desperation (Hishikiken toriseshû) | Genre : Action | Year : 2010 | Rating : 7.2 | ID : e91934db-6616-4fb7-ae54-92a0e43e9e11
FilmName | Morley & Me: The Puppy Years | Genre : Children | Year : 2011 | Rating : 3.5 | ID : 50e43ce5-f523-421c-b1a0-48bfdf01027

```

Figure 18: lightened database part 1

```

Singapore Sling (Singapore sling: O anthropos pou agapise ena ptoma) | Genre : Comedy | Year : 1990 | Rating : 6.5 | ID : 09762913-3642-4a21-a959-330f6705673e
Love Beats Rhymes | Genre : Drama | Year : 2017 | Rating : 5.5 | ID : a2c8b205-0795-4b54-ab5e-13b0f0f0c2c3
High Risk | Genre : Action | Year : 1999 | Rating : 6.1 | ID : 0bf9e672-0123-4ebd-a049-4330a0a13aa
Darkest Hour, The | Genre : Comedy | Year : 2011 | Rating : 4.9 | ID : ae793ede-475b-4dd1-b466-bda0f7366564
The Pee-wee Herman Show on Broadway | Genre : Comedy | Year : 2011 | Rating : 7.8 | ID : ab6072a2-bed3-44be-84c0-24f848fcd8c4
Dog Problem, The | Genre : Comedy | Year : 2006 | Rating : 6.2 | ID : 59a11499-8c4b-43f0-9370-3falc70840b4
Beautiful Mind, A | Genre : Drama | Year : 2001 | Rating : 8.2 | ID : 18f1bc24-f520-47b4-ad29-a849bd2bcd9c
Miss Matéo | Genre : Comedy | Year : 2005 | Rating : 6.1 | ID : 4a0fa5a8-3eb3-4c07-9f5a-56705a02e8a0
Forced Vengeance | Genre : Adventure | Year : 1982 | Rating : 5.6 | ID : 9509aaac-ed17-4eac-0f87-c0f9ae926291
District 13: Ultimatum (Banlieue 13 - Ultimatum) | Genre : Action | Year : 2009 | Rating : 6.5 | ID : 875100b6-fb14-49c4-838e-bddc3e14a571
Major League II | Genre : Sport | Year : 1994 | Rating : 5.6 | ID : 08e4c2c7-d357-4008-9a5a-ada5c44a4751
Pinky Boy, The (Que te lactes, La) | Genre : Drama | Year : 1969 | Rating : 7.5 | ID : 50af9a59-376c-45b7-8bda-acdbaa5352f6
Lake Placid | Genre : Comedy | Year : 1999 | Rating : 5.7 | ID : 503ad82c-510b-407f-b46c-1afc90a5b221
Manhattan | Genre : Drama | Year : 2014 | Rating : 7.8 | ID : 09f10130-20bc-41ec-b58c-4c78dfe9b08d
Apostle, The | Genre : Drama | Year : 1997 | Rating : 7.2 | ID : 4e238c61-9c15-4789-b0ba-a97e0e9e7f1
Mighty Aphrodite | Genre : Comedy | Year : 1995 | Rating : 7.0 | ID : 36a1a201-c803-4542-a910-d0eb656cc861
Moon | Genre : Drama | Year : 2009 | Rating : 7.8 | ID : ba7c5833-7261-4d07-a07c-dbe080f17c7b
Once You're Born You Can No Longer Hide (Quando sei nato non puoi più nasconderti) | Genre : Adventure | Year : 2005 | Rating : 6.7 | ID : 925c357c-3e55-47ad-8487-9054541f1278a
Sonner der Gaukler, Der | Genre : Comedy | Year : 2011 | Rating : 6.1 | ID : 36041a7c-b334-4ec2-a704-ffc7243107d0
Tibet: Cry of the Snow Lion | Genre : Documentary | Year : 2002 | Rating : 7.6 | ID : a0d08f4e-5740-420a-ba4e-cb3a54f8277d
Night of the Comet | Genre : Sci-Fi | Year : 1984 | Rating : 6.4 | ID : f703770f-eeed-4ab6-8865-50a29e355c7f
Hall Mary ('Je vous salue, Marie') | Genre : Drama | Year : 1985 | Rating : 6.5 | ID : 4ebab791-9ed7-49f9-99b5-6bb3aa87f529
Executive Suite | Genre : Drama | Year : 1954 | Rating : 7.4 | ID : 0ecd60d3-deec-4821-8192-bb5cc8a4720
Crying out Love in the Center of the World (saka no chûshin de, ai o sakaba) | Genre : Drama | Year : 2004 | Rating : 7.3 | ID : e05c824b-7336-4f69-8744-fad4f6cf2f50
The Butterfly Collector: The Red Room | Genre : Mystery | Year : 2021 | Rating : 8.0 | ID : 96cca933-7c0c-4c35-a0aa-890868779122
Fantomas (Fantômas - À l'ombre de La guillotine) | Genre : Crime | Year : 1964 | Rating : 7.0 | ID : aa7894ad-54fe-42a1-a190-805aa5ae8f05a
Day of the Dead | Genre : Comedy | Year : 1985 | Rating : 7.1 | ID : 4e774c32-4719-4b11-94a9-7a050f7ec6d0
Justice League: Throne of Atlantis | Genre : Animation | Year : 2015 | Rating : 8.5 | ID : 7077f703-a151-461f-8c99-5be013a3c741
Raisin in the Sun, A | Genre : Drama | Year : 1961 | Rating : 8.0 | ID : 43d7249f-0d15-4071-9145-c474f78c6c4
Onebyhearts | Genre : Drama | Year : 1989 | Rating : 6.7 | ID : 6d0edc1e-9098-4772-b03b-7a990716ac2c
Robert & Frank | Genre : Fantasy | Year : 2012 | Rating : 7 | ID : 063c3f5c-2c4f-4372-9a58-e921100bb042
Slumber Party '57 | Genre : Drama | Year : 1976 | Rating : 4.1 | ID : c8e0e50a-eb45-42e2-90e8-f9c3f331b256
Valmont | Genre : Romance | Year : 1989 | Rating : 7.0 | ID : b756a4c7-7ba0-4993-a2c4-a04b0b3a3206
Chicken Little | Genre : Animation | Year : 2005 | Rating : 8.5 | ID : 5024bf99-485e-4e91-be31-6ee2fca9a46f
Earthlings | Genre : Documentary | Year : 2005 | Rating : 8.7 | ID : 820901fe-df8c-4211-8dac-750c69737faa
Angel and the Badman | Genre : Western | Year : 1917 | Rating : 6.9 | ID : a5c05092-f673-4b58-9f60-a0301f49388
Lovely Bones, The | Genre : Drama | Year : 2009 | Rating : 6.7 | ID : 8127ee42-c0ac-4f02-b401-a9aad2d2f0b1
The Gunman | Genre : Action | Year : 2015 | Rating : 5.8 | ID : af0d0772-e020-4e9f-a20d-c06432277c85
Grapes of Death, The (Raisins de la mort, Les) | Genre : Comedy | Year : 1978 | Rating : 6.1 | ID : f8a5558f-5413-45fb-807b-91fd205f0a6a
The Confessions of Bernhard Goetz | Genre : Documentary | Year : 1987 | Rating : 7.7 | ID : 7af83c1d-cb1f-4096-a897-4aac92db29a
V for Vendetta | Genre : Action | Year : 2005 | Rating : 8.1 | ID : 9d280f73-209e-440b-4239-bb0e3a3bc306
Hard to Kill | Genre : Action | Year : 1990 | Rating : 5.8 | ID : 022cc60b-cd41-473c-8896-4f39493d00d4
prend la cibulette et tire toi | Genre : Drama | Year : 2016 | Rating : 5.0 | ID : aacab3aa-0faa-4daa-a028-aaae8f4aaf6

```

Figure 19: lightened database part 2

4 Conclusion

This Homework, i learned how to manipulate data inside a database using Python and the sqlite3 module. Moreover, i learned how to convert a .sql file to a .db file using Pythcon. That way i will be harder to modify data that are stored in the .db file. I prefer using python rather than Mysql because i will be able to reuse my Python code unlike a Mysql coding in the shell.

About the LaTeX Language, I made some progress. Now, i can readjust images the way i like, so the final result looks cleaner. However, I'm not going to change my mind: LaTeX makes me lose time compared to other software like Word.