1. Setup information

The programming language used is python 3.6.7 and the necessary steps in other to use a redis client are:

- Install the gcc compiler(useful for the correct execution of the make file used to install redis)
- Install the python package manager pip: install pip
- Then install the redis client library using the following command: pip install redis

In order to run the programm, we just need to enter from the command line the following command:

 Python3 lab1

2. Some useful scenarios

Here is a brief description of the various options in the menu:

1. In other to PUBLIS a book, we just need to run the program and choose option number 1, then we need to provide necessary information such as(ISBN,title,ect…).After pressing enter Enter , the book will be saved into the DB and the and a message will be automatically sent to the corresponding channel containing the book's ISBN
2. In other to subscribe to a channel, we need to choose option 2 from the input menu and then provide a pattern for the channel we want to subscribe to(NB: I assumed we can subscribe to one channel at time)
3. This option allows to borrow a specific book and will tell the user wether it's available or not ,if it's expired or not
4. Choose this option to return a book and then provide the ISBN of the book you want to return.
5. This option allows you to give as input the book's ISBN and returns the corresponding data.
6. In other to read messages received on a channel a and retrieve from the ID the corresponding data, use this option

3. Example of program execution

- Scenario 1:
  - Python3 lab1 (to lunch the program)
  - Enter 1
  - Insert information about the book
  - Read the output message to check If the operation correctly completed or not

- Scenario : 2
  - Python3 lab1
  - Enter 2
  - Insert the channel keyword

- Scenario3 :
  - Python3 lab1
  - Enter 3
  - Enter book's ISBN NB: I assumed we can only borrow 1 book at time
- Scenario 4 :
  - Python3 lab1
  - Enter 4
  - Enter the book's ISBN
- Scenario 5 :
  - Python3 lab1
  - Enter 5
  - Enter book's ISBN
- Scenario 6:
  - Python3 lab1
  - Enter 6
  - Enter the name of the channel