Creating Book Databases

In [7]:
```
import datetime
import json
```

Databases of books that contains | dictionary

In [2]:
```
# getting the issue date and return date

def issue_date():
    d = datetime.date.today()
    date = d.strftime('%d-%m-%Y')
    return date

def return_date():
    dt2 = datetime.timedelta(days=7)
    d = datetime.date.today() + dt2
    date = d.strftime('%d-%m-%Y')
    return date
```

Function for getting the book id

In [39]:
```
def get_bookid():
    book_lst = []
    for i in range(3):
        i = input()
        if i == 'q':
            break
        elif str(i) in book_db.keys():            # logic check whether the book is present inside t
            book_lst.append(i)
            if book_db[i]['quantity'] >= 0:
                book_db[i]['quantity'] = str(int(book_db[i]['quantity'])- 1) # if the book is presen
            else:
                print('Book Not available')
        else:
            print('Currently the book is not available ')
    return book_lst
```

Adding Books to Books Database

In [5]:
```
# books database
books_data = {}
```

In [37]:
```
# master books
fd = open('book_data.json','r')
txt = fd.read()
fd.close()

book_db = json.loads(txt)

# inputing the data of the books
book_id     = str(input('Enter the books id                    : '))
book_name   =     input('Enter the name of the book             : ')
quantity    =     input('Enter the quantity of book available   : ')
genre       =     input('Enter the Genre of the book            : ')
price       =     input('Enter the price of the book            : ')
author      =     input('Enter the name of the author           : ')

# temporary books
books_ = {}
books_['book_name'] = book_name
books_['quantity'] = quantity
books_['genre'] = genre
books_['price'] = price
books_['author'] = author

books_data[book_id] = books_

text = json.dumps(books_data)

fd = open('book_data.json','w')
fd.write(text)
fd.close()
```

```
Enter the books id                    : 1001
Enter the name of the book            : Kimentsu no yaiba
Enter the quantity of book available  : 25
Enter the Genre of the book           : Comics
Enter the price of the book           : 25
Enter the name of the author          : Nakasaki
```

Adding more students to Students database

In [10]:
```
# students database
students_data = {}
```

In [40]:
```
# master books

fd = open('student_data.json','r')
text = fd.read()
fd.close()

# converting the json data in dictionary
students_data = json.loads(text)

# inputs
student_id             = int(input('Enter your Student Id             : '))
stud_name              = input('Enter your Name                   : ')
grad_year              = input('Enter your Graduation Year        : ')
grad_degree            = input('Enter your Graduation Degree      : ')
books_issued           = get_bookid()
issue_date             = issue_date
return_date            = return_date


# temporary student data dictionary

students_ = {}
students_['stud_name']     = stud_name
students_['grad_year']     = grad_year
students_['grad_degree']   = grad_degree
students_['books_issued']  = books_issued
students_['issue_date']    = issue_date()
students_['return_date']   = return_date()


# adding all the temporary data to the master dictionary
students_data[student_id] = students_

# converting back to text
text = json.dumps(students_data)

# adding the data to the student database
fd = open('student_data.json','w')
fd.write(text)
fd.close()
```

```
Enter your Student Id         : 19131005
```

```
Enter your Name                    : Mahendra
Enter your Graduation Year         : 2023
Enter your Graduation Degree       : B.Tech
1000
10002
Currently the book is not available
1002
Currently the book is not available
```