

Design the required class/es so that the following output is generated.

Read the following description:

- The Library class has two dictionaries: one contains borrower information(the name of borrowers and the number of books they borrowed) and the other contains book availability information (book type and their remaining number)
- A reader cannot borrow more than 5 books.
- If a book's availability is 0 in the Library, then the reader cannot borrow that book.
- The readerInfo method in the Reader class prints the type and the number of all books borrowed if no parameter is passed, else it prints the number of books borrowed of the specific type mentioned in the parameter. You may use the default argument for this.

Driver Code	Output
<pre>L1=Library('Dhaka',{'Arts':15,'Fiction':135,'Politics':2,'Science':11,'Poetry':15}) L1.details() print("1-----") r1=Reader('Aladdin') r1.borrow(L1,'Arts','Fiction','Fiction','Politics') print("2-----") r1.borrow(L1,'Politics','Fiction') print("3-----") r1.readerInfo() print("4-----") r1.readerInfo('Fiction') print("5-----") L1.details() print("6-----") r2=Reader('Jasmine') r2.borrow(L1,'Politics','Poetry') print("7-----") r2.readerInfo() print("8-----") L1.details()</pre>	<pre>Dhaka Library details Borrower details: {} Books availability: {'Arts': 15, 'Fiction': 135, 'Politics': 2, 'Science': 11, 'Poetry': 15} 1----- Arts book is borrowed successfully. Fiction book is borrowed successfully. Fiction book is borrowed successfully. Politics book is borrowed successfully. 2----- Politics book is borrowed successfully. You cannot borrow more than 5 books. 3----- Aladdin, you have 5 book(s) with you. Books on Arts: 1 Books on Fiction: 2 Books on Politics: 2 4----- Aladdin, you have 2 Fiction book(s) with you. 5----- Dhaka Library details Borrower details: {'Aladdin': 5} Books availability: {'Arts': 14, 'Fiction': 133, 'Politics': 0, 'Science': 11, 'Poetry': 15} 6----- Politics books are not available at the</pre>

moment.  
Poetry book is borrowed successfully.  
7-----  
Jasmine, you have 1 book(s) with you.  
Books on Poetry: 1  
8-----  
Dhaka Library details  
Borrower details:  
{ 'Aladdin': 5, 'Jasmine': 1 }  
Books availability:  
{ 'Arts': 14, 'Fiction': 133,  
'Politics': 0, 'Science': 11, 'Poetry':  
14 }