

Test Report

This report consists of the test case outputs obtained after running them during TDD, performed while developing the production code and testing it simultaneously.

1. Add books in the library

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
.
-----
Ran 1 test in 0.013s

OK
```

2. Borrow the book available in the library

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book 'To Kill a Mockingbird' added to the library with ISBN '2'.
Book has been borrowed
  ISBN      Title              Author Publication Year Is Borrowed
0   1   The Great Gatsby  F. Scott Fitzgerald    1925      True
1   2   To Kill a Mockingbird  Harper Lee            1960     False
.
-----
Ran 1 test in 0.035s

OK
```

3. Borrowing the book which is already borrowed

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book has been borrowed
  ISBN      Title              Author Publication Year Is Borrowed
0   1   The Great Gatsby  F. Scott Fitzgerald    1925      True
Book is not available to borrow
.
-----
Ran 1 test in 0.010s

OK
```

4. Borrow a book which does not in the library

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Twilight Saga' added to the library with ISBN '1'.
Book not present
.
-----
Ran 1 test in 0.004s

OK
```

5. Return the borrowed book

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book 'The Twilight Saga' added to the library with ISBN '2'.
Book 'The Great Gatsby' added to the library with ISBN '3'.
Book has been borrowed
  ISBN      Title      Author Publication Year Is Borrowed
0  1  The Great Gatsby  F. Scott Fitzgerald    1925      False
1  2  The Twilight Saga  Stephenie Meyer        2005      False
2  3  The Great Gatsby  F. Scott Fitzgerald    1925      True
Book has been returned
  ISBN      Title      Author Publication Year Is Borrowed
0  1  The Great Gatsby  F. Scott Fitzgerald    1925      False
1  2  The Twilight Saga  Stephenie Meyer        2005      False
2  3  The Great Gatsby  F. Scott Fitzgerald    1925      False
.
-----
Ran 1 test in 0.054s

OK
```

6. Return a book which was not borrowed

Output:

```
PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book 'The Twilight Saga' added to the library with ISBN '2'.
Book 'The Great Gatsby' added to the library with ISBN '3'.
Book has been borrowed
  ISBN      Title      Author Publication Year Is Borrowed
0  1  The Great Gatsby  F. Scott Fitzgerald    1925      False
1  2  The Twilight Saga  Stephenie Meyer        2005      True
2  3  The Great Gatsby  F. Scott Fitzgerald    1925      False
Book is already there. Check the ISBN code again.
.
-----
Ran 1 test in 0.015s

OK
```

7. Return a book that is not even added to the library

Output:

```

PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book 'The Twilight Saga' added to the library with ISBN '2'.
Book 'The Great Gatsby' added to the library with ISBN '3'.
The book which you want to return is not registered in the system.
.
-----
Ran 1 test in 0.006s

OK

```

8. Return all the books which are available in the library

Output:

```

PS C:\Users\devanshi\Desktop\Data Analytics\Incubyte> python -m unittest Test_cases.py
Book 'The Great Gatsby' added to the library with ISBN '1'.
Book 'The Twilight Saga' added to the library with ISBN '2'.
Book 'To Kill a Mockingbird' added to the library with ISBN '3'.
Book 'The Great Gatsby' added to the library with ISBN '4'.
Book has been borrowed
  ISBN      Title      Author Publication Year Is Borrowed
0  1      The Great Gatsby F. Scott Fitzgerald    1925      False
1  2      The Twilight Saga Stephenie Meyer        2005      False
2  3  To Kill a Mockingbird Harper Lee            1960      False
3  4      The Great Gatsby F. Scott Fitzgerald    1925      True
Book has been borrowed
  ISBN      Title      Author Publication Year Is Borrowed
0  1      The Great Gatsby F. Scott Fitzgerald    1925      False
1  2      The Twilight Saga Stephenie Meyer        2005      True
2  3  To Kill a Mockingbird Harper Lee            1960      False
3  4      The Great Gatsby F. Scott Fitzgerald    1925      True
Book has been returned
  ISBN      Title      Author Publication Year Is Borrowed
0  1      The Great Gatsby F. Scott Fitzgerald    1925      False
1  2      The Twilight Saga Stephenie Meyer        2005      True
2  3  To Kill a Mockingbird Harper Lee            1960      False
3  4      The Great Gatsby F. Scott Fitzgerald    1925      False
Available books:
  ISBN      Title      Author Publication Year Is Borrowed
0  1      The Great Gatsby F. Scott Fitzgerald    1925      False
2  3  To Kill a Mockingbird Harper Lee            1960      False
3  4      The Great Gatsby F. Scott Fitzgerald    1925      False
.
-----
Ran 1 test in 0.121s

OK

```