

## Spring 2023: CSE111 Lab Mid

## Set B

Name:	ID:	Section: 01
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Observe the following Driver Code and its corresponding Output.  
Design the **BracuLibrary** and **BracuStudent** classes so that the following output is generated.

Driver Code	Output
<pre># Do not change the following lines of code  lib1 = BracuLibrary('CSE',{'NLP':2,'Machine Learning':15,'Artificial Intelligence':13}) lib2 = BracuLibrary('BBA',{'Marketing':10,'Finance':15,'Communication':13}) lib1.libraryInfo() print("1=====") lib2.libraryInfo() print("2=====") st1 = BracuStudent('Brad',20201438,'BBA') st1.borrow(lib1,'NLP-1') print("3=====") st1.borrow(lib2,'Marketing-1','Finance-2') st1.borrow(lib2,'Communication-2','Finance-2') print("4=====") st1.studentInfo() print("5=====") st1.studentInfo('Banking') print("6=====") st1.studentInfo('Marketing') print("7=====") lib2.libraryInfo()</pre>	<pre>Available Books for the students of CSE department: NLP - 2 Machine Learning - 15 Artificial Intelligence - 13 Borrower details: {} 1===== Available Books for the students of BBA department: Marketing - 10 Finance - 15 Communication - 13 Borrower details: {} 2===== Wrong Department! You cannot borrow books from other departments. 3===== Brad is borrowing 1 Marketing book(s).... Brad is borrowing 2 Finance book(s).... Brad is borrowing 2 Communication book(s).... Brad, you cannot borrow more than 5 books. 4===== Name: Brad ID: 20201438 Department: BBA Brad, you have borrowed 5 book(s). Book Details: {'Marketing': 1, 'Finance': 2, 'Communication': 2} 5=====</pre>

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print("8=====")
st2 = BracuStudent('Alex', 22101560)
st2.borrow(lib1, 'NLP-2', 'Artificial
Intelligence-1')
print("9=====")
st2.studentInfo()
print("10=====")
st3 = BracuStudent('Mary', 19101400)
st3.borrow(lib1, 'NLP-1', 'Machine
Learning-2')
print("11=====")
st3.studentInfo()
print("12=====")
lib1.libraryInfo()

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Banking book(s) are not available
in BRACU Library.
6=====
Brad, you have borrowed 1 Marketing
book(s).
7=====
Available Books for the students of
BBA department:
Marketing - 9
Finance - 13
Communication - 11
Borrower details: {'Brad': 5}
8=====
Alex is borrowing 2 NLP book(s)....
Alex is borrowing 1 Artificial
Intelligence book(s)....
9=====
Name: Alex ID: 22101560
Department: CSE
Alex, you have borrowed 3 book(s).
Book Details: {'NLP': 2,
'Artificial Intelligence': 1}
10=====
NLP books are not available at the
moment.
Mary is borrowing 2 Machine
Learning book(s)....
11=====
Name: Mary ID: 19101400
Department: CSE
Mary, you have borrowed 2 book(s).
Book Details: {'Machine Learning':
2}
12=====
Available Books for the students of
CSE department:
NLP - 0
Machine Learning - 13
Artificial Intelligence - 12
Borrower details: {'Alex': 3,
'Mary': 2}

```