



DALHOUSIE UNIVERSITY

CS 5408 – Data Management, Warehousing and Analytics

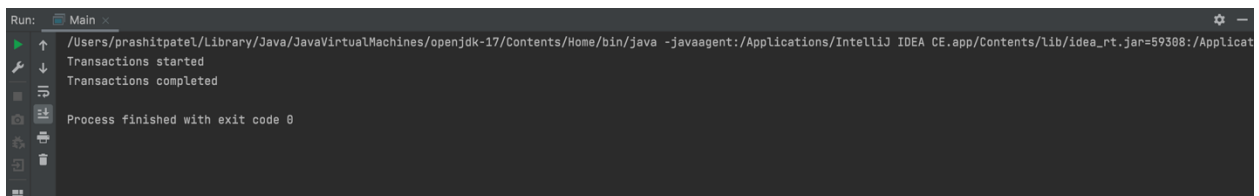
Assignment – 2 Problem 2 Task 2

Prashit Patel - B00896717

I Prashit Prakashbhai Patel, declare that in assignment 2 of CSCI 5408 course, data scrapping is not done programmatically or using any online or offline tools. However, the webpages within dal.ca domain are visited manually, and some useful information is gathered for education purpose only. Information, such as email, personal contact numbers, or names of people are not extracted. The course instructor or the Faculty of Computer Science cannot be held responsible for any misuse of the extracted data.

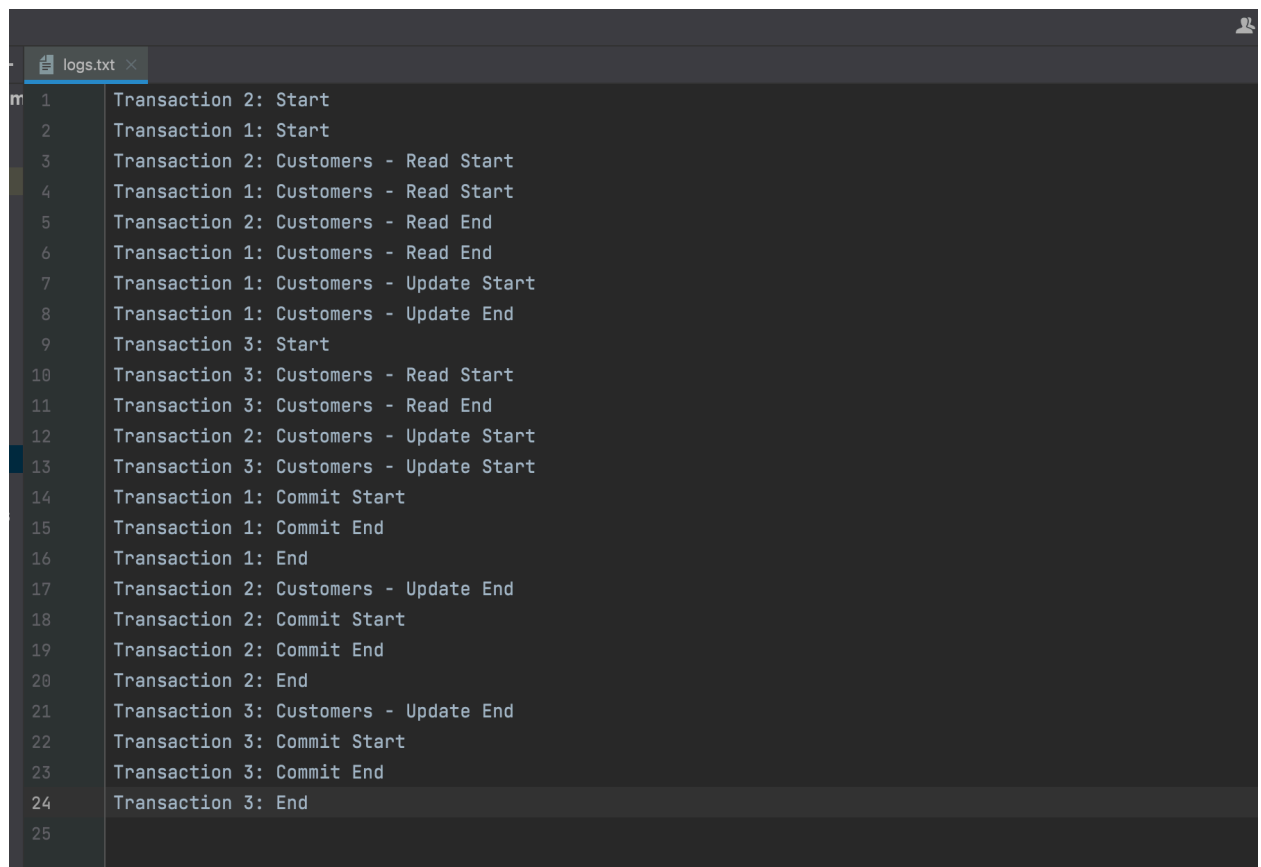
- Program code added to following repository
- Concurrent transaction screenshots

Before locking execution



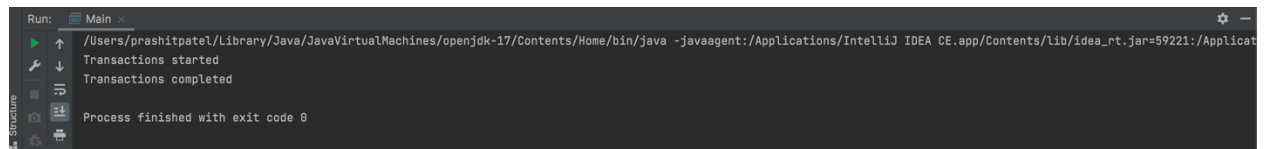
```
Run: Main x
/Users/prashitpatel/Library/Java/JavaVirtualMachines/openjdk-17/Contents/Home/bin/java -javaagent:/Applications/IntelliJ IDEA CE.app/Contents/lib/idea_rt.jar=59308:/Applicat
Transactions started
Transactions completed
Process finished with exit code 0
```

Before locking log file output



```
logs.txt x
1 Transaction 2: Start
2 Transaction 1: Start
3 Transaction 2: Customers - Read Start
4 Transaction 1: Customers - Read Start
5 Transaction 2: Customers - Read End
6 Transaction 1: Customers - Read End
7 Transaction 1: Customers - Update Start
8 Transaction 1: Customers - Update End
9 Transaction 3: Start
10 Transaction 3: Customers - Read Start
11 Transaction 3: Customers - Read End
12 Transaction 2: Customers - Update Start
13 Transaction 3: Customers - Update Start
14 Transaction 1: Commit Start
15 Transaction 1: Commit End
16 Transaction 1: End
17 Transaction 2: Customers - Update End
18 Transaction 2: Commit Start
19 Transaction 2: Commit End
20 Transaction 2: End
21 Transaction 3: Customers - Update End
22 Transaction 3: Commit Start
23 Transaction 3: Commit End
24 Transaction 3: End
25
```

After locking execution



After locking log file output

```
logs.txt x
1 Transaction 1: Start
2 Transaction 2: Start
3 Transaction 2: Read Lock
4 Transaction 2: Customers - Read Start
5 Transaction 1: Read Lock
6 Transaction 1: Customers - Read Start
7 Transaction 1: Customers - Read End
8 Transaction 2: Customers - Read End
9 Transaction 2: Read Lock Released
10 Transaction 1: Read Lock Released
11 Transaction 1: Write Lock
12 Transaction 1: Customers - Update Start
13 Transaction 1: Customers - Update End
14 Transaction 3: Start
15 Transaction 1: Commit Start
16 Transaction 1: Commit End
17 Transaction 1: Write Lock Released
18 Transaction 2: Write Lock
19 Transaction 2: Customers - Update Start
20 Transaction 1: End
21 Transaction 2: Customers - Update End
22 Transaction 2: Commit Start
23 Transaction 2: Commit End
24 Transaction 2: Write Lock Released
25 Transaction 2: End
26 Transaction 3: Read Lock
27 Transaction 3: Customers - Read Start
28 Transaction 3: Customers - Read End
29 Transaction 3: Read Lock Released
30 Transaction 3: Write Lock
31 Transaction 3: Customers - Update Start
32 Transaction 3: Customers - Update End
33 Transaction 3: Commit Start
34 Transaction 3: Commit End
35 Transaction 3: Write Lock Released
36 Transaction 3: End
```

References:

[1] Oreilly [Online]

Available: <https://www.oreilly.com/library/view/mysql-reference-manual/0596002653/ch06s07.html>

[2] Baeldung [Online]

Available: <https://www.baeldung.com/java-how-to-create-a-file>