A3 - Report

Assumptions

The following assumptions have been made based on both piazza posts, and meetings with TAs.

Recoverable Schedule

- Deadlocks need to be detected when we see commit operations only and aborts are performed at the end of the whole input if and only if we are unable to resolve the aborts naturally

Cascadeless Recoverable Schedule

- We detect deadlocks on the go and resolve it as soon as we see them
- Upon finding a deadlock, one might abort some other transaction or **all** the deadlocked transactions and we will accept all those variations

How to Use the Application

Please run this application on the student environment.

After downloading **A3.cpp** from the learn drop-box:

1. Run the following command to get the **A3** executable

```
g++ -g -std=c++14 -Wall A3.cpp -o A3
```

2. Run the application by providing it a valid input file

```
./A3 sampleTest.txt
```

The application will create a corresponding output file. The output file will always be named as **inputFileName**_output.txt where **inputFileName** is the name of the input file without extension. A sample test file (named sampleTest.txt) has been uploaded to the learn dropbox for your reference.