**TEAM MEMBERS:**

1) **MEGHA VIJENDRA** (**1001736938**)

2) **ARPITHA VENKANNA PATIL** (**1001777613**)

**PROGRAMMING LANGUAGE USED**:

We have used JAVA programming language to develop the code for the project. We have used maven project option of the Eclipse IDE.

**HOW TO RUN THE CODE? :**

1. The code must be imported as a maven project in Eclipse IDE.
2. In the src/main/java we have three packages each implementing different waiting methods for rigorous two-phase locking protocol.
3. We can check the functionality of each of the waiting method by running the RigorousTwoPhaseLocking.java present in each package
4. The data folder contains:

* The input files which have a series of transactions for which we simulate the behavior of the two-phase locking (2PL) protocol for concurrency control.
* The output files which is generated by the different waiting methods.

output\_woundwait.txt is generated by rigorous 2PL using wound wait method.

output\_waitdie.txt is generated by rigorous 2PL using wound wait method.

output\_cautious.txt is generated by rigorous 2PL using wound wait method.

1. The output file will be generated for the respective input file in the same input folder.
2. To see variations of input files( Such as Input 1, Input 2, Input 3, ... ),

* modify the input and output path in the RigorousTwoPhaseLocking.java file in different packages to see the different outputs, respectively.

**TASK DISTRIBUTION AMONGST TEAM MEMBERS:**

1) MEGHA VIJENDRA

Development of functions begin, active, request, block, commit, acquirelocks, releaseLocks and abort

2) ARPITHA VENKANNA PATIL

Development of functions lock\_rr, lock\_ww, lock\_wr, lock\_rw and creation of operations, transactions tables