#### Hope Foundation's, Finolex Academy of Management and Technology, Ratnagiri **Department of Information Technology** Subject name: **OLAP LAB** Subject Code: ITL503 Semester – Class TE IT Academic year: 2018-19 (CBCGS) Name of Student Kazi Jawwad A Rahim **QUIZ Score:** Roll No Assignment/Experiment No. 32 01 Title: Implementation of Two Phase locking protocol.

# 1. Course objectives applicable:

LOB1- Understand the stages and properties of transactions and the concepts involved with Serializability.

# 2. Course outcomes applicable:

**LO1**- Apply the knowledge of Concurrency control management to simulate Two Phase Locking protocol.

### 3. Learning Objectives:

- To be able to apply the knowledge of Concurrency control management.
- To be able to understand the working of Two Phase Commit protocol.

# 3. Practical applications of the assignment/experiment:

- Wherever the distributed database management system is utilized, the 2 PC or 3 PC protocols are implemented to achieve atomicity. E.g. Banking system.
- **5. Prerequisites**: Working of Client Server communication, Transaction properties.

### 6. Hardware Requirements:

1. PC with 4GB RAM, 500GB HDD,

#### 7. Software Requirements:

1. Programming language, Java

# 8. Quiz Questions (if any): (Online Exam will be taken separately batch wise, attach the certificate/ Marks obtained)

- 1. What is transaction?
- 2. List all the properties of transaction.
- 3. What is atomicity?

9. Exp	eriment/Assignment Eval	tion:		
Sr. No.	Parameters		Marks obtained	Out of
1	Technical Understanding (Assessment may be done based on Q & A <u>or</u> any other relevant method.) Teacher should mention the other method used -			6
2	Neatness/presentation			2
3	Punctuality			2
Date of performance (DOP)		Total marks obtained		10
Date of checking (DOC)		Signature of teacher		

### **Results:**

```
E:\2-Phase>java Server
Now Total clients are : 1
Now Total clients are : 2
Now Total clients are : 3
From 'Jawwad' : COMMIT
Waiting for inputs from other clients.
From 'ABC' : COMMIT
Waiting for inputs from other clients.
From 'XYZ' : COMMIT
Commited....
E:\2-Phase>java Client
Enter your name.
Jawwad
Welcome Jawwad to this 2 Phase Application.
You will receive a vote Request now...
VOTE REQUEST
Please enter COMMIT or ABORT to proceed :
---A new user ABC entered the Appilcation---
 --A new user XYZ entered the Appilcation---
GLOBAL_COMMIT
Enter your name.
--A new user Jawwad entered the Appilcation---
 --A new user ABC entered the Appilcation---
Welcome XYZ to this 2 Phase Application.
You will receive a vote Request now...
VOTE_REQUEST
Please enter COMMIT or ABORT to proceed :
commit
GLOBAL COMMIT
```

```
Enter your name.
---A new user Jawwad entered the Appilcation---
Welcome ABC to this 2 Phase Application.
You will receive a vote Request now...
VOTE_REQUEST
Please enter COMMIT or ABORT to proceed :
---A new user XYZ entered the Appilcation---
GLOBAL COMMIT
E:\2-Phase>java Server
Now Total clients are : 1
Now Total clients are : 2
Now Total clients are : 3
From 'XYZ' : COMMIT
Waiting for inputs from other clients.
From 'ABC' : COMMIT
waiting for inputs from other clients.
rom 'Jawwad' : ABORT
Since aborted we will not wait for inputs from other clients.
Aborted....
E:\2-Phase>java Client
Enter your name.
Jawwad
Welcome Jawwad to this 2 Phase Application.
You will receive a vote Request now...
VOTE REQUEST
Please enter COMMIT or ABORT to proceed :
---A new user ABC entered the Appilcation---
---A new user XYZ entered the Appilcation---
abort
GLOBAL_ABORT
```

```
E:\2-Phase>java Client

Enter your name.

---A new user Jawwad entered the Appilcation---
ABC

Welcome ABC to this 2 Phase Application.

You will receive a vote Request now...

VOTE_REQUEST

Please enter COMMIT or ABORT to proceed:

---A new user XYZ entered the Appilcation---
commit

GLOBAL_ABORT
```

```
E:\2-Phase>java Client

Enter your name.

---A new user Jawwad entered the Appilcation---

---A new user ABC entered the Appilcation---

XYZ

Welcome XYZ to this 2 Phase Application.

You will receive a vote Request now...

VOTE_REQUEST

Please enter COMMIT or ABORT to proceed:

commit

GLOBAL_ABORT
```

#### References:

- 1. https://www.javatpoint.com/mysql-tutorial
- 2. Advance Database Management system by Rini Chakrabarti.