**LAB CYCLE 2**

Consider the following Schema

Supplier(SID, Sname, branch, city, phone)

Part(PID, Pname, color, price)

Supplies(SID, PID, qty, date\_supplied)

1. Create Supplier table with Primary Key Constraint

2. Create Supplies table with Foreign key Constraint

3. Create Part table with UNIQUE and NOT NULL Constraint for Pname

4. Create Part Table with Check Constraints for color with values only ‘red’ or ‘green’

5. Create Supplier table with Default Constraint for branch as ‘local’

**Queries using aggregate Functions:**

1. Find the minimum, maximum, average and sum of costs of parts

2. Count the total number of parts present

3. Retrieve the average cost of all parts supplied by ‘Mike’

**Queries on GROUP BY, HAVING, and ORDER BY Clauses**:

1. Display the total price of parts of each color

2. Find the branch and the number of suppliers in that branch for branches that have more than 2 suppliers

3. Find all parts sorted by pname in ascending order and cost in descending order

4. Find the branch and the number of suppliers in that branch

**Queries on Operators**

1. Find the pname, phoneno and cost of parts which have cost equal to or greater than 200 and

less than or equal to 600.

2. Find the sname , SID and branch of suppliers who are in ‘local’ branch or ‘global’ branch

3. Find the pname, phoneno and cost of parts for which cost is between 200 and 600

4. Find the pname and color of parts , which has the word ‘NET’ anywhere in its pname.

5. Find the PID and pname of parts with pname either ‘NUT’ or ‘BOLT’

6. List the suppliers who supplied parts on ‘1st may2000’, ‘12 JAN 2021’ ,’17 dec 2000’ ,’10 Jan 2021’

7. Find all the distinct costs of parts

**Queries on Set Theory Operators**

1. List all parts except ‘NUT’ and ‘BOLT’ in ascending order of costs

2. Display all parts that have not been supplied so far

3. To display the supplier names who have supplied ‘green’ part with cost 500 Rupees AND

‘red’ part with cost 400 Rupees.

4. To Display the name of suppliers who have supplied all parts that are ‘red’ in color.