SE IT	Roll number :
Experiment no. : 9	Date of Implementation :

Aim : To implement JDBC Connectivity with PostgreSQL

Tool Used : PostgreSQL and Java

Related Course outcome : At the end of the course, Students should be able to
1. Construct problem definition statements for real life applications and implement a database for the same.

Rubrics for assessment of Experiment:

Indicator	Poor	Average	Good
Timeliness Maintains Experiment deadline (3)	Experiment not done (0)	One or More than One week late (1-2)	Maintains deadline (3)
Completeness and neatness Complete all parts of Experiment(3)	N/A	< 80% complete (1-2)	100% complete (3)
Originality Extent of plagiarism(2)	Copied it from someone else(0)	At least try to implement but could not succeed (1)	Implemented (2)
Knowledge In depth knowledge of the Experiment(2)	Unable to answer any questions(0)	Unable to answer few questions (1)	Able to answer all questions (2)

Assessment Marks :

Timeliness	
Completeness and neatness	
Originality	
Knowledge	
Total	

Total :   (Out of 10)

Teacher's Sign :

EXPERIMENT 9	JDBC Connectivity with SQL
Aim	To implement connection between JAVA and PostgreSQL
Tools	PostgreSQL and Java

Theory	JDBC stands for **J**ava **D**ata**b**ase **C**onnectivity, which is a standard Java API for database-independent connectivity between the Java programming language and a wide range of databases. There are 5 steps to connect any java application with the database in java using JDBC. They are as follows: • Register the driver class • Creating connection • Creating statement • Executing queries • Closing connection **1) Register the driver class** The forName() method of Class class is used to register the driver class. This method is used to dynamically load the driver class. Syntax of forName() method public static void forName(String className)throws ClassNotFoundException **2) Create the connection object** The getConnection() method of DriverManager class is used to establish connection with the database. Syntax of getConnection() method public static Connection getConnection(String url)throws SQLException **3) Create the Statement object** The createStatement() method of Connection interface is used to create statement. The object of statement is responsible to execute queries with the database. Syntax of createStatement() method public Statement createStatement()throws SQLException **4) Execute the query** The executeQuery() method of Statement interface is used to execute queries to the database. This method returns the object of ResultSet that can be used to get all the records of a table. Syntax of executeQuery() method public ResultSet executeQuery(String sql)throws SQLException

	5) Close the connection object By closing connection object statement and ResultSet will be closed automatically. The close() method of Connection interface is used to close the connection. Syntax of close() method public void close()throws SQLException
Procedure	1. Create table Employee(ssn, name, address, salary, deptno) 2. Build application in Netbeans using JDBC connectivity to perform any two operations from create, insert, delete, update or display the data in a table.
Observations :	