NAME – RAJDEEP JAISWAL	**DATE – 19 NOV 2021**
BRANCH – BTECH CSE	**SEC = 608 - A**
UID -20BCS2761	**Subject – JAVA**

AIM – Write a program in Java that enters student details (Roll No, Name etc) and retrieves information. Use Access as a database and write the application in **JDBC**. (AWT or JFame)

THEORY:

JDBC stands for Java Database connectivity's. It is a software layer that allows developers to write real client-server projects in Java. JDBC is based on the X/OPEN call level interface (CLI) for SQL. JDBC was designed to be a very compact, simple interface focusing on the execution of raw SQL statements and retrieving the results. The components of JDBC are Application, Driver manager and Driver.

Code in text –

```
//step 1- import the java.sql package
import java.sql.*;
Class Customer {
public static void main(String arg[ ]) throws SQLException {


//step 2-register the driver
class.forName ("sun.jdbc.odbc.JdbcOdbcDriver");


//step 3-connect to a database
```

```
Connection c=
DriverManager.getConnection("Jdbc.odbc:DSN","username","password");


//step 4- create a statement
Statement s = c.createStatement( );


//step 5-execute the statement
Resultset rs = s.executeQuery (" SQL statement");
```

s.executeUpdate( ): This is used for all DDL command present in a database (ALTER, DROP, INSERT and CREATE). This does not returns anything but executes the query and update the database.

s.execute( ): This method is used to execute an SQL statement that may return multiple returns The return value is a Boolean. Which is true if the next result is a Resultset and false if it is an update count or there are no more results.

```
//step 6- for displaying the column name
ResultSetMetaData rsmd =rs.getMetaData( );
int i =rsmd.getColumnCount( );
for(int j=i; j<=i; j++)
{
System.out.println( rsmd.getColumnName( j)+"\t");
System.out.println(" ");
}


//step 7-retrieve the results
while(rs.next( ) );
```

```
{
for(int j=i; j<=i; j++)
{
System.out.println( rs.getString( j)+"\t");
}
System.out.println(" ");
}


//step 8-close the statement and connection
s.close( );
c.close( );
}
}
```

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			