**DATE: 23-10-2021** **IMPLEMENTATION OF REMOTE COMMAND EXECUTION (RCE)**

**AIM:**

To implement Remote Command Execution(RCE).

**ALGORITHM:**

**CLIENT SIDE:**

Step 1: Establish a connection between the Client and Server.

Socket client=new Socket("127.0.0.1",6555);

Step 2: Create instances for input and output streams.

Print Stream ps=new Print Stream(client.getOutputStream());

Step 3: BufferedReaderbr=newBufferedReader(newInputStreamReader(System.in));

Step 4. Enter the command in Client Window.

Send themessage to its output

str=br.readLine();

ps.println(str);

**SERVER SIDE:**

Step 1: Accept the connection request by the client.

ServerSocket server=new ServerSocket(6555);

Sockets=server.accept();

Step 2: GettheIPaddressfromitsinputstream.

BufferedReaderbr1=newBufferedReader(newInputStreamReader(s.getInputStream()));

ip=br1.readLine();

Step 3: During runtime execute the process

Runtime r=Runtime.getRuntime();

Process p=r.exec(str);

**PROGRAM CODE:**

**CLIENT SIDE:**

import java.io.\*;

import java.net.\*;

classclientRCE

{

public static void main(String args[]) throws IOException

{

try

{

String str;Socket client=new Socket("127.0.0.1",6555);

PrintStreamps=new PrintStream(client.getOutputStream());

BufferedReaderbr=new BufferedReader(new InputStreamReader(System.in));

System.out.println("\t\t\t\tCLIENT WINDOW\n\n\t\tEnterTheCommand:");

str=br.readLine();

ps.println(str);

}

catch(IOException e)

{

System.out.println("Error"+e); }

}

}

**SERVER SIDE:**

import java.io.\*;

import java.net.\*;

classserverRCE

{

public static void main(String args[]) throws IOException

{

try

{

String str;

ServerSocket server=new ServerSocket(6555);

Socket s=server.accept();

BufferedReaderbr=new BufferedReader(new InputStreamReader(s.getInputStream()));

str=br.readLine();

Runtime r=Runtime.getRuntime();

Process p=r.exec(str);

}

catch(IOException e)

{

System.out.println("Error"+e);

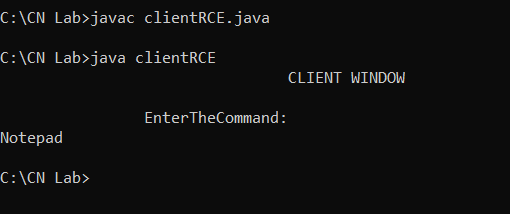
}

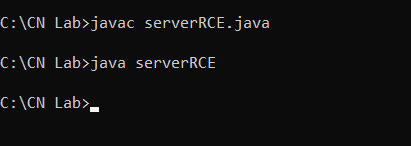
}

}

**OUTPUT:**

**CLIENT SIDE:**

****

**SERVER SIDE:   
**

**RESULT:**

Thus the implementation RCE is done and executed successfully.