

CONTENT BEYOND SYLLABUS

IMPLEMENTATION OF REMOTE COMMAND EXECUTION (RCE)

AIM

To implement Remote Command Execution (RCE).

ALGORITHM

Client

1. Establish a connection between the Client and Server.
`Socket client=new Socket("127.0.0.1",6555);`
2. Create instances for input and output streams.
`Print Stream ps=new Print Stream(client.getOutputStream());`
3. `BufferedReaderbr=newBufferedReader(newInputStreamReader(System.in));`
4. Enter the command in Client

Window. Send the message to its output

`str=br.readLine();`

`ps.println(str);`

Server

1. Accept the connection request by the client.
`ServerSocket server=new ServerSocket(6555); Sockets=server.accept();`
2. Get the IP address from its input stream.
`BufferedReaderbr1=newBufferedReader(newInputStreamReader(s.getInputStream()));`
`ip=br1.readLine();`
3. During runtime execute the process
Runtime
`r=Runtime.getRuntime(); Process`
`p=r.exec(str);`

PROGRAM

Client

```
import java.io.*;
import java.net.*;

class clientRCE
{
    public static void main(String args[]) throws IOException
    {
        try
        {
            String str; Socket client=new Socket("127.0.0.1",6555);
            PrintStream ps=new PrintStream(client.getOutputStream());
            BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
            System.out.println("\t\t\tCLIENT WINDOW\n\n\t\tEnter The Command:");
            str=br.readLine();
            ps.println(str);
        }
        catch(IOException e)
        {
            System.out.println("Error"+e); }
    }
}
```

Server

```
import java.io.*;
import java.net.*;

class serverRCE
{
    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()));

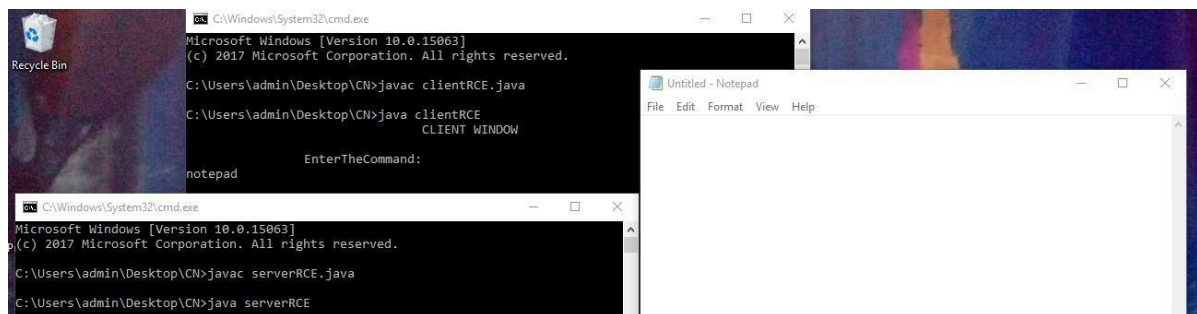
str=br.readLine();

Runtime r=Runtime.getRuntime();

Process p=r.exec(str);
}
catch(IOException e)
{
System.out.println("Error"+e);
}
}
}
}

```

OUTPUT



RESULT

Thus the implementation RCE is done & executed successfully.