

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. `BufferedReader br=new BufferedReader(new InputStreamReader(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.

```
BufferedReader br1=new BufferedReader(new InputStreamReader(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\tEnterTheCommand:");
            str=br.readLine();
            ps.println(str);
        }
        catch(IOException e)
        {
            System.out.println("Error"+e); }
    }
}
```

Server

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

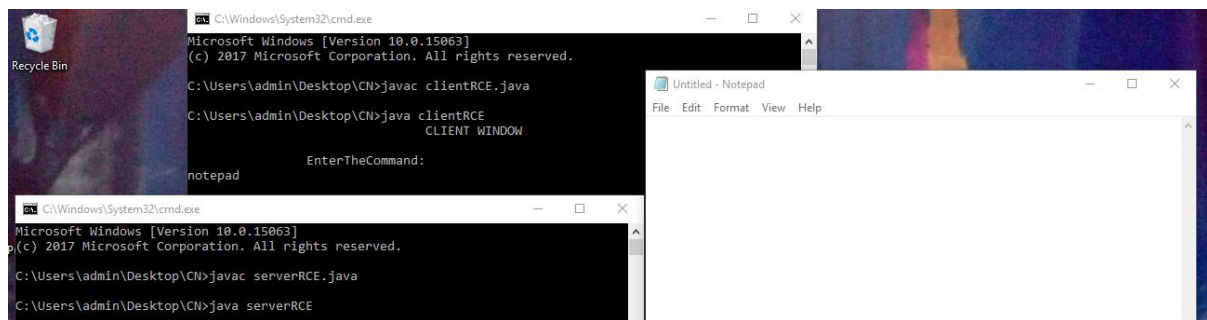
class serverRCE
{
    public static void main(String args[]) throws IOException
    {
        try
```

```

{
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.