

CONTENT BEYOND SYLLABUS

IMPLEMENTATION OF REMOTE COMMAND EXECUTION (RCE)

AIM:

To implement Remote Command Execution(RCE).

ALGORITHM:

CLIENT SIDE:

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 SIDE:

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);
```

CLIENT PROGRAM:

```
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 TheCommand:");
str=br.readLine();
ps.println(str);
}
catch(IOException e)
{
System.out.println("Error"+e); }
}
}

```

SERVER PROGRAM:

```

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();

```

```

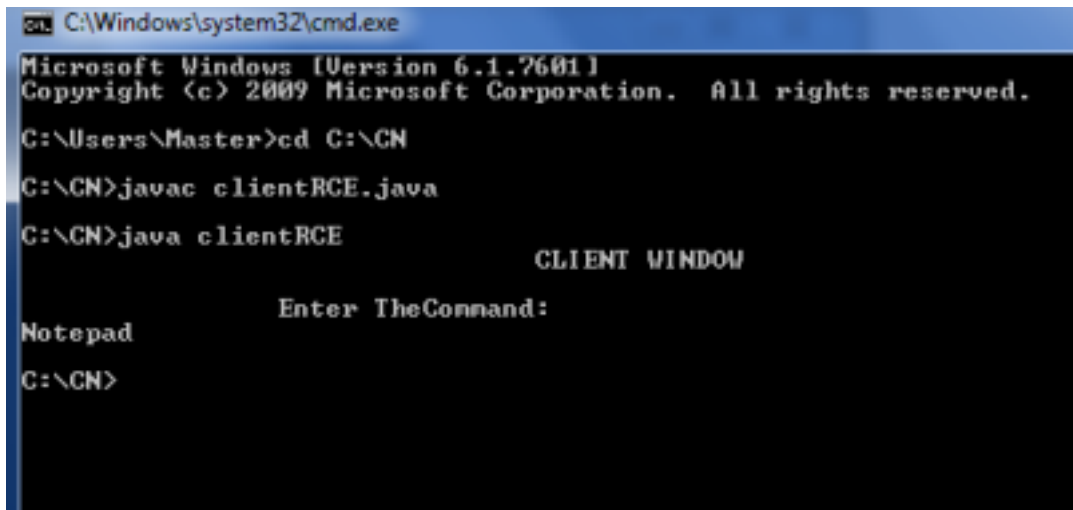
BufferedReader br=new BufferedReader(new InputStreamReader(s.getInputStream()));
str=br.readLine();

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

```

OUTPUT:

CLIENT WINDOW:

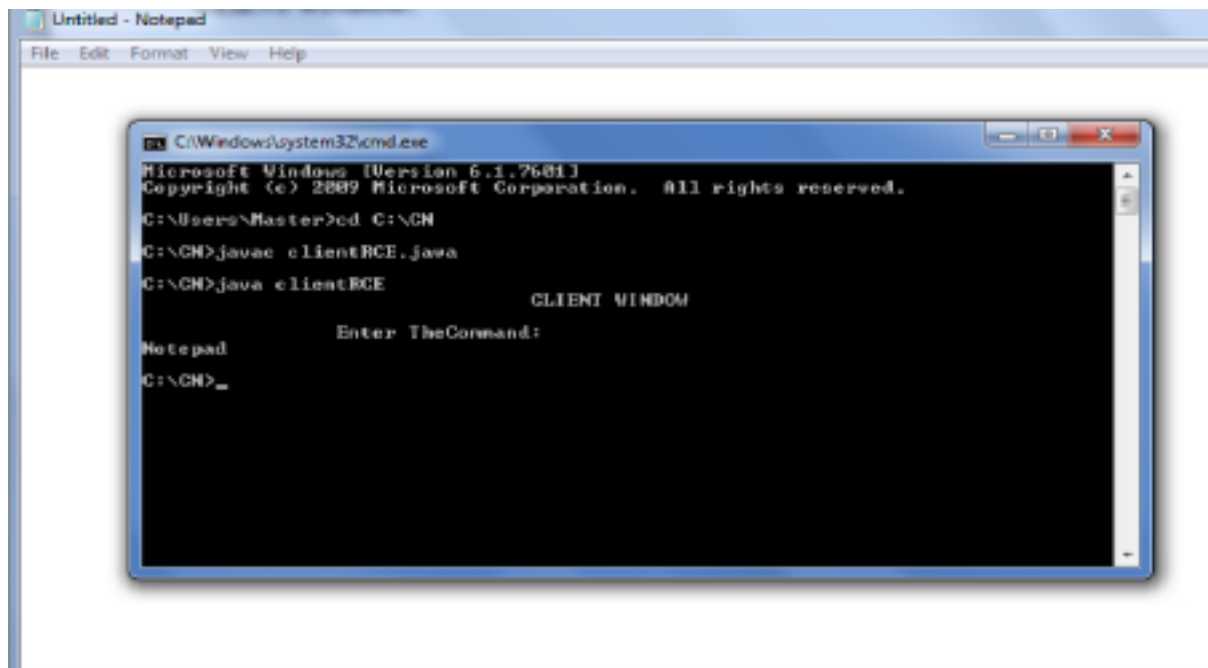


```

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Master>cd C:\CN
C:\CN>javac clientRCE.java
C:\CN>java clientRCE
CLIENT WINDOW
Enter TheCommand:
Notepad
C:\CN>

```



```
Untitled - Notepad
File Edit Format View Help

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Master>cd C:\CN
C:\CN>javac clientRCE.java
C:\CN>java clientRCE

CLIENT WINDOW

Enter TheCommand:

Notepad
C:\CN>_
```

RESULT:

Thus the implementation RCE is done & executed successfully.