IPCServer.java

package **EXP\_2**;

*// Write a Program to demonstrate Inter-process Communication in Client-Server Environment Using Java.*

*// Vishal Yadav - 211P042 - BE Computer*

import **java**.**net**.\*;

import **java**.**io**.\*;

public class **IPCServer**

{

public static void **main**(**String** args[])

{

**System**.out.**println**("\n \*\*\*\* INTERPROCESS COMMUNICATION\*\*\*\*\n");

**System**.out.**println**("\n \*\*\*\* SERVER PROCESS STARTED \*\*\*\*\n");

**System**.out.**println**("\n \*\*\*\* SERVER IS READY AND WAITING TO RECEIVE DATA FROM CLIENT (VISHAL YADAV) PROCESS ON PORT\*\*\*\*"+1200);

try

{

**ServerSocket** ss =new **ServerSocket**(1200); *//1200 is port number*

**Socket** clientSocket=ss.**accept**();

**System**.out.**println**("\n \*\*\*\* Client is connected with IP address\*\*\*\*"+clientSocket.**getInetAddress**() +"and port Number"+clientSocket.**getPort**());

**DataOutputStream** dos =new **DataOutputStream**(clientSocket.**getOutputStream**());

**DataInputStream** dis =new **DataInputStream**(clientSocket.**getInputStream**());

int a = dis.**readInt**();

**System**.out.**println**("\n SERVER RECEIVED");

**System**.out.**println**("\n NUMBER 1 =====>"+a);

int b =dis.**readInt**();

**System**.out.**println**("\n NUMBER 2====>"+b);

int c=a+b;

dos.**writeInt**(c);

**System**.out.**println**("\n SERVER PROCESS HAS EXECUTED REQUESTED PROCESS AND SENT RESULT "+c+"TO THE CLIENT\n");

clientSocket.**close**();

**System**.out.**println**("\n SERVER PROCESS EXITING....................");

ss.**close**();

}

catch(**Exception** e)

{

**System**.out.**println**("Exception: "+e);

}

}

}

IPCClient.java

package **EXP\_2**;

import **java**.**net**.\*;

import **java**.**io**.\*;

public class **IPCClient**

{

public static void **main**(**String** args[])

{

try

{

**Socket** s= new **Socket**("localhost",1200);

**DataOutputStream** dos = new **DataOutputStream**(s.**getOutputStream**());

**DataInputStream** dis= new **DataInputStream**(s.**getInputStream**());

**InputStreamReader** isr = new **InputStreamReader**(**System**.in);

**System**.out.**println**("\n \t\*\*\*\*\*\*\*\*\*\*\*\* CLIENT PROCESS STARTED\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

**System**.out.**println**("\n \*\*\*\*\*PLEASE ENTER THE VALUES OF NUMBER 1 AND NUMBER 2 TO PASS THEM TO SERVER PROCESS\*\*\*\*\*\*\*\*\*\*\n");

**BufferedReader** br= new **BufferedReader**(isr);

int a = **Integer**.**parseInt**(br.**readLine**());

**System**.out.**println**("Number 1===>"+a);

dos.**writeInt**(+a);

int b = **Integer**.**parseInt**(br.**readLine**());

**System**.out.**println**("Number 2=====>"+b);

dos.**writeInt**(+b);

int result = dis.**readInt**();

**System**.out.**println**("\n.......................CLIENT PROCESS HAS RECEIVED RESULT FROM SERVER..................\n");

**System**.out.**println**("\n THE ADDITION OF "+a+"IS"+result);

s.**close**();

}

catch(**Exception** e)

{

**System**.out.**println**("Exception is "+e);

}

}

}