

Assignment No - 1b

Rmi implementation

Rmi implementation steps :

1. Create all java files and compile using **javac** command , it will generate **.class** files
2. Generate stubs invoking **rmic AddServerImpl** it will generate **AddServerImpl_Stub.class** file.
3. Copy **AddClient.class**, **AddServerImpl_Stub.class**, and **AddServerIntf.class** to a directory on the client machine.
- 4.. Copy **AddServerIntf.class**, **AddServerImpl.class**, **AddServerImpl_Stub.class**, and **AddServer.class** to a directory on the server machine.
5. Start the RMI Registry on the Server Machine using **rmiregistry**
6. Start the Server using **java AddServer** in new terminal
- 7.Start the Client **java AddClient servername/ip_address 8 9** in new terminal where servername is first argument and 8 , 9 are second & third argument respectively.

CODE:-

ADDCilent.java:-

```
import java.rmi.*;

public class AddClient {
    public static void main(String args[]) {
        try {
            String addServerURL = "rmi://" + args[0] + "/AddServer";
            AddServerIntf addServerIntf =
                (AddServerIntf)Naming.lookup(addServerURL);
            System.out.println("The first number is: " + args[1]);
            double d1 = Double.valueOf(args[1]).doubleValue();
            System.out.println("The second number is: " + args[2]);
            double d2 = Double.valueOf(args[2]).doubleValue();
            System.out.println("The sum is: " + addServerIntf.add(d1, d2));
        }
        catch(Exception e) {
            System.out.println("Exception: " + e);
        }
    }
}
```

ADDServer.java:-

```
import java.net.*;
import java.rmi.*;
public class AddServer {
public static void main(String args[]) {
try {
AddServerImpl addServerImpl = new AddServerImpl();
Naming.rebind("AddServer", addServerImpl);
}
catch(Exception e) {
System.out.println("Exception: " + e);
}
}
}
```

ADDServerImpl:-

```
import java.rmi.*;
import java.rmi.server.*;
public class AddServerImpl extends UnicastRemoteObject
implements AddServerIntf {
public AddServerImpl() throws RemoteException {
}
public double add(double d1, double d2) throws RemoteException {
return d1 + d2;
}
}
```

ADDServerIntf:-

```
import java.rmi.*;
public interface AddServerIntf extends Remote {
double add(double d1, double d2) throws RemoteException;
}
```