

CODE IMPLEMENTATION :

```
AddServerImpl.java (~/.Distributed_Systems/Assignment1) - gedit
Open [icon]
AddClient.java x AddServer.java x AddServerImpl.java x
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.java (~/.Distributed_Systems/Assignment1) - gedit
Open [icon]
import java.rmi.*;
public interface AddServerIntf extends Remote{
double add(double d1,double d2) throws RemoteException;
}
```

AddServer.java (~/.Distributed_Systems/Assignment1) - gedit

Open ▾

AddClient.java × 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);
    }
    }
}
```

AddClient.java (~/.Distributed_Systems/Assignment1) - gedit

Open ▾

AddClient.java × AddServer.java × AddServerImpl.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);
    }
    }
}
```

The screenshot displays a Linux desktop environment with a dark theme. On the left is a vertical dock containing icons for the Dash, Home, and various applications including Firefox, LibreOffice, and a terminal. The top of the screen features a panel with 'Activities', 'Terminal', and a clock showing 'May 9 22:14'. Two terminal windows are open. The left window, titled 'vaibhav@vaibhav-VirtualBox: ~/LPS/Assign1', shows the process of compiling Java files: listing files, running 'rmic AddServerImpl', receiving a warning about deprecated skeletons, and starting 'rmiregistry'. The right window, titled 'vaibhav@vaibhav-VirtualBox: ~/LPS/Assign1', shows the execution of the compiled classes: running 'javac *.java', then 'java AddClient 127.0.0.1 5 8', which outputs the first and second numbers and their sum (13.0).

```

Activities  Terminal  May 9 22:14

vaibhav@vaibhav-VirtualBox: ~/LPS/Assign1
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ cd LPS/Assign1/
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ ls
AddClient.class  AddServer.class  AddServerImpl.java  AddServerIntf.class  AddServer.J
ava
AddClient.java  AddServerImpl.class  AddServerImpl_Stub.class  AddServerIntf.java  'New Text Document.txt'
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ javac *.java
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ rmic AddServerImpl
Warning: generation and use of skeletons and static stubs for JRMPI
is deprecated. skeletons are unnecessary, and static stubs have
been superseded by dynamically generated stubs. Users are
encouraged to migrate away from using rmic to generate skeletons and static
stubs. See the documentation for java.rmi.server.UnicastRemoteObject.
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ rmiregistry

vaibhav@vaibhav-VirtualBox: ~/LPS/Assign1
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ cd LPS/Assign1/
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ javac *.java
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$ java AddClient 127.0.0.1 5 8
The first number is: 5
The second number is: 8
The sum is: 13.0
vaibhav@vaibhav-VirtualBox:~/LPS/Assign1$
  
```