

## DS Lab Assignment 1

### Code

#### **AddServer.java -**

```
import java.rmi.*;

public class AddServer {

    public static void main(String args[]) {

        try {

            //create remote object

            AddServerImpl addServerImpl = new AddServerImpl();

            //bind the remote object

            Naming.rebind("AddServer", addServerImpl);

        }

        catch (Exception e) {

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

        }

    }

}
```

#### **AddClient.java –**

```
import java.rmi.*;

public class AddClient {

    public static void main(String args[]) {

        try {

            // Get reference to the remote object

            String addServerURL = "rmi://" + args[0] + "/AddServer";

            AddServerIntf addServerIntf =

            (AddServerIntf) Naming.lookup(addServerURL);

            System.out.println("The first number is: " + args[1]);

            double d1 = Double.parseDouble(args[1]);

            System.out.println("The second number is: " + args[2]);

            double d2 = Double.parseDouble(args[2]);

            // Invoke remote method to add numbers

            System.out.println("The sum is: " + addServerIntf.add(d1, d2));

        }

    }

}
```

```
catch (Exception e) { System.out.println("Exception: "+ e);  
    }  
    }  
    }
```

#### **AddServerIntf.java -**

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

#### **AddServerImpl.java –**

```
import java.rmi.*;  
import java.rmi.server.*;  
  
//class that implements the remote interface  
public class AddServerImpl extends UnicastRemoteObject  
implements AddServerIntf {  
    //constructor  
  
    public AddServerImpl() throws RemoteException {  
  
    }  
  
    //implement method declared in the interface  
  
    public double add(double d1, double d2) throws RemoteException {  
        return d1 + d2; }  
  
}
```

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### Output

```
C:\Users\prasa>cd C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1
C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1>start rmiregistry
C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1>java AddServer
```

```
WARNING: A terminally deprecated method in java.lang.System has been called
WARNING: System::setSecurityManager has been called by sun.rmi.registry.RegistryImpl
WARNING: Please consider reporting this to the maintainers of sun.rmi.registry.RegistryImpl
WARNING: System::setSecurityManager will be removed in a future release
```

```
C:\Users\prasa>cd C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1
C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1>java AddClient localhost 3.7 4.1
The first number is: 3.7
The second number is: 4.1
The sum is: 7.8
C:\Users\prasa\Downloads\BE-IT-DS-main\BE-IT-DS-main\Assign1>
```