

20BCE1550  
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CSE4001 Lab 12  
Java RMI

Code:

Adder.java

```
Adder.java
1  import java.rmi.*;
2
3  public interface Adder extends Remote {
4      public int add(int x, int y) throws RemoteException;
5  }
```

AdderRemote.java

```
AdderRemote.java
1  import java.rmi.*;
2  import java.rmi.server.*;
3
4  public class AdderRemote extends UnicastRemoteObject implements Adder {
5      AdderRemote() throws RemoteException {
6          super();
7      }
8      public int add(int x, int y) {
9          return x + y;
10     }
11 }
```

## MyServer.java

```
MyServer.java
1  import java.rmi.*;
2  import java.rmi.registry.*;
3
4  public class MyServer {
5      public static void main(String args[]) {
6          try {
7              Adder stub = new AdderRemote();
8              Naming.rebind("rmi://localhost:5000/lab12", stub);
9          } catch (Exception e) {
10             System.out.println(e);
11          }
12      }
13  }
```

## MyClient.java

```
MyClient.java
1  import java.rmi.*;
2
3  public class MyClient {
4      public static void main(String args[]) {
5          try {
6              Adder stub = (Adder) Naming.lookup("rmi://localhost:5000/lab12");
7              System.out.println(stub.add(34, 4));
8          } catch (Exception e) {}
9      }
10 }
```

## Steps:

1. Create all the files and compile them all:

```
~/vit/CSE4001_Parallel-and_Distributed-Computing_ETLP/Lab/20221101 — sam  
(11:26:08) —> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.345.b01-1.fc36.x86_64/bin/javac *.java
```

2. Create the stub and skeleton for AdderRemote:

```
~/vit/CSE4001_Parallel-and_Distributed-Computing_ETLP/Lab/20221101 — sam fedo  
(11:26:12) —> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.345.b01-1.fc36.x86_64/bin/rmic AdderRemote
```

3. Create the RMI Registry:

```
~/vit/CSE4001_Parallel-and_Distributed-Computing_ETLP/Lab/20221101 — sam fedo  
(11:26:22) —> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.345.b01-1.fc36.x86_64/bin/rmiregistry 5000 &  
[1] 303551
```

4. Run MyServer:

```
[1] 303551  
~/vit/CSE4001_Parallel-and_Distributed-Computing_ETLP/Lab/20221101 — sam fedo  
(11:26:41) —> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.345.b01-1.fc36.x86_64/bin/java MyServer
```

5. Run MyClient:

```
~/vit/CSE4001_Parallel-and_Distributed-Computing_ETLP/Lab/20221101 — sam fedo  
(11:27:16) —> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.345.b01-1.fc36.x86_64/bin/java MyClient  
38
```