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REGISTER NO.- 20BCE1798

PARALLEL AND DISTRIBUTED COMPUTING

LAB – 12

CODES:

Adder.java:

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

AdderRemote.java:

```java
import java.rmi.*; import java.rmi.server.*;
public class AdderRemote extends UnicastRemoteObject implements Adder{ AdderRemote()throws RemoteException{
super();
}
public int add(int x,int y){return x+y;}
}
```

MyServer.java:

```java
import java.rmi.*;
import java.rmi.registry.*; public class MyServer{
public static void main(String args[]){ try{
Adder stub=new AdderRemote(); Naming.rebind("rmi://localhost:5000/sonoo",stub);
}catch(Exception e){System.out.println(e);}
}
}
```

MyClient.java:

```
import java.rmi.*; public class MyClient{

public static void main(String args[]){ try{

Adder stub=(Adder)Naming.lookup("rmi://localhost:5000/sonoo"); System.out.println(stub.add(34,4));

}catch(Exception e){}

}

}
```

Implementation:

Compiling Adder and AdderRemote:

```
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ javac Adder.java
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ javac AdderRemote.java
```

Running

rmic:

```
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ rmic AdderRemote
Warning: generation and use of skeletons and static stubs for JRMP
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been superseded by dynamically generated stubs.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.
```

Rmiregistry set port to 5000

```
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ rmiregistry 5000
```

Compiling Server and Client in a different Command Prompt:

```
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ javac MyServer.java
lab2@AB1210SC0PE70:~/Desktop/JAVARMI$ javac MyClient.java
```

Running as Server in a terminal:

```
lab2@AB1210SCOPE70:~/Desktop/JAVARMI$ java MyServer
```

Running as Client in terminal to get answer from server:

```
lab2@AB1210SCOPE70:~/Desktop/JAVARMI$ java MyClient
38
lab2@AB1210SCOPE70:~/Desktop/JAVARMI$
```

Installing snap:

```
lab2@AB1210SCOPE70:~/Desktop$ sudo rm /etc/apt/preferences.d/nosnap.pref
lab2@AB1210SCOPE70:~/Desktop$ sudo apt update
Hit:1 https://deb.opera.com/opera-stable stable InRelease
Hit:2 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:3 http://archive.canonical.com/ubuntu focal InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Ign:5 http://packages.linuxmint.com uma InRelease
Hit:6 http://archive.ubuntu.com/ubuntu focal InRelease
Hit:7 http://packages.linuxmint.com uma Release
Hit:8 http://ppa.launchpad.net/wireshark-dev/stable/ubuntu focal InRelease
Get:10 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:11 http://archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Fetched 222 kB in 2s (102 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
376 packages can be upgraded. Run 'apt list --upgradable' to see them.
lab2@AB1210SCOPE70:~/Desktop$ sudo apt install snapd
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
```

Installing and starting bytecode viewer:

```
lab2@AB1210SCOPE70:~/Desktop$ sudo snap install bytecode-viewer --beta
2022-11-01T10:49:39+05:30 INFO Waiting for automatic snapd restart...
bytecode-viewer (beta) 2.9.22 from 林博仁(Buo-ren, Lin) (brlin) installed
lab2@AB1210SCOPE70:~/Desktop$ bytecode-viewer
https://the.bytecode.club - Created by @Konloch - Bytecode Viewer 2.9.22, Fat-Ja
r: true
Gtk-Message: 10:58:04.327: Failed to load module "xapp-gtk3-module"
Start up took 2 seconds
Extracting Krakatau
Succesfully extracted Krakatau
Extracting Enjarify
Succesfully extracted Enjarify
```

Bytecode-viewer: