

RMI Code :-

```
import java.rmi.Remote;
import java.rmi.RemoteException;

interface Arithmetic extends Remote {
    int add(int a, int b) throws RemoteException;
    int subtract(int a, int b) throws RemoteException;
}
```

Arithmetic Implementation Code :-

```
import java.rmi.server.UnicastRemoteObject;
import java.rmi.RemoteException;

public class ArithmeticImpl extends UnicastRemoteObject implements Arithmetic {
    public ArithmeticImpl() throws RemoteException {
        super();
    }

    @Override
    public int add(int a, int b) throws RemoteException {
        return a + b;
    }

    @Override
    public int subtract(int a, int b) throws RemoteException {
        return a - b;
    }
}
```

Server Code :-

```
import java.rmi.Naming;
import java.rmi.registry.LocateRegistry;

public class server{
    public static void main(String[] args) {
        try {
            LocateRegistry.createRegistry(1099);
            Arithmetic arithmetic = new ArithmeticImpl();
            Naming.rebind("rmi://localhost/ArithmeticService", arithmetic);
            System.out.println("ArithmeticServer is running....");
        }
        catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Client Code :-

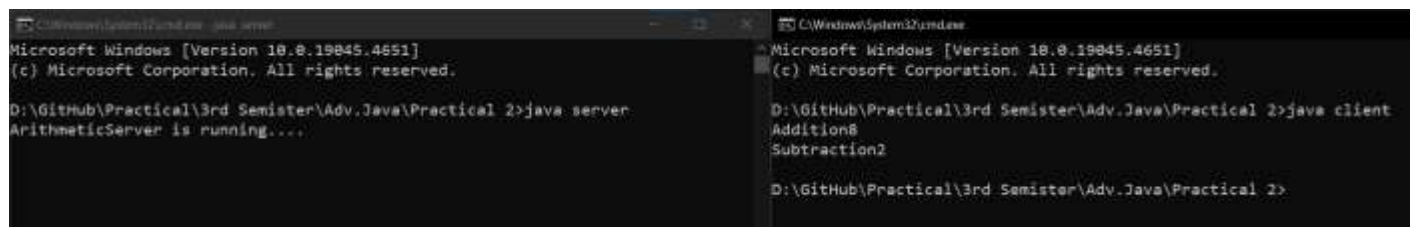
```
import java.rmi.;

public class client{
    public static void main(String[] args) {
        try {
            Arithmetic arithmetic =(Arithmetic) Naming.lookup("rmi://localhost/ArithmeticService");

            int sum = arithmetic.add(5,3);
            int diffrencece = arithmetic.subtract(5,3);

            System.out.println("Addition" + sum);
            System.out.println("Subtraction" + diffrencece);
        }
        catch(Exception e){
            e.printStackTrace();
        }
    }
}
```

Output :-



The image shows two side-by-side terminal windows. The left window is titled 'C:\Windows\System32\cmd.exe' and shows the command 'java server' being executed, resulting in the output 'ArithmeticServer is running....'. The right window is also titled 'C:\Windows\System32\cmd.exe' and shows the command 'java client' being executed, resulting in the output 'Addition8' and 'Subtraction2'.

```
Microsoft Windows [Version 10.0.19045.4651]
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D:\GitHub\Practical\3rd Semester\Adv.Java\Practical 2>java server
ArithmeticServer is running....

Microsoft Windows [Version 10.0.19045.4651]
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D:\GitHub\Practical\3rd Semester\Adv.Java\Practical 2>java client
Addition8
Subtraction2

D:\GitHub\Practical\3rd Semester\Adv.Java\Practical 2>
```