

Client Program :

```
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.JButton; import
javax.swing.JFrame; import
javax.swing.JLabel; import
javax.swing.JTextField; import
java.rmi.NotBoundException; import
java.rmi.RemoteException; import
java.rmi.registry.LocateRegistry; import
java.rmi.registry.Registry; import
java.util.Scanner; import
java.awt.Color;

class Swing extends JFrame implements ActionListener {

    JButton jb1;
    JTextField jt1;
    JLabel lbl, lb3;

    Swing() {

        lb3 = new JLabel("Enter number");
        lb3.setForeground(Color.WHITE);
        lb3.setBounds(160, 50, 150, 60);    add(lb3);

        jt1 = new JTextField();
        jt1.setBounds(160, 100, 150, 30);
        add(jt1);
```

```
        lbl = new JLabel("Result :");  
lbl.setForeground(Color.WHITE);  
lbl.setBounds(160, 140, 150, 30);  
        add(lbl);
```

```
        jb1 = new JButton("Check");  
jb1.setBounds(160, 200, 100, 30);    add(jb1);
```

```
        jb1.addActionListener(this);
```

```
        setLayout(null);    setSize(600, 400);  
setVisible(true);    setTitle("Prime Number");  
getContentPane().setBackground(Color.BLACK);  
    }
```

```
    public void actionPerformed(ActionEvent e)  
{  
        try  
        {  
            Registry reg = LocateRegistry.getRegistry("localhost",3333);  
            prime pd = (prime)reg.lookup("Hii Server");  
            int a = Integer.parseInt(jt1.getText());
```

```
            String c;
```

```
            if (e.getSource().equals(jb1)) {        c =  
pd.prime(a);        lbl.setText("Result : "+
```

```

String.valueOf(c));
lbl.setForeground(Color.WHITE);
    }
    }catch(RemoteException p)
    {
        System.out.println("Exception"+e);
    }catch(NotBoundException q)
    {
        System.out.println("Exception"+e);
    }
}

public static void main(String args[]) throws RemoteException ,NotBoundException
{
    Swing t = new Swing();

}
}

```

Server Program :

```

import java.rmi.RemoteException; import
java.rmi.registry.LocateRegistry; import
java.rmi.registry.Registry; import
java.rmi.server.UnicastRemoteObject;

```

```
public class prime_server extends UnicastRemoteObject implements prime{  
    public prime_server() throws RemoteException
```

```
    {  
        super();  
    }
```

```
    //@Override
```

```
    public String prime(int n) throws RemoteException {
```

```
        int num = n;
```

```
        String p = "Noo";
```

```
        boolean flag = false;
```

```
        for (int i = 2; i <= num / 2; ++i) {
```

```
            // condition for nonprime number
```

```
            if (num % i == 0) {
```

```
                flag = true;
```

```
                break;
```

```
            }
```

```
        }
```

```
        if (!flag)
```

```
            p="Yes";
```

```
        else
```

```
            p="No";
```

```
            return p;
```

```
        }
```

```
    public static void main(String args[]) throws RemoteException
```

```
    {
```

```
        try
```

```
        {
```

```
Registry reg = LocateRegistry.createRegistry(3333);
reg.rebind("Hii Server", new prime_server());
    System.out.println("Server Ready!..");
}
catch(RemoteException e)
{
    System.out.println("Exception" +e);
}
}
```

Register Program :

```
import java.rmi.*; public interface
prime extends Remote
{
    public String prime(int n) throws RemoteException ;
}
```

Outputs:

