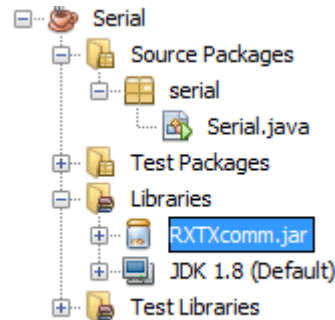


Permasalahan Praktikum RFID

Membuat aplikasi untuk membaca RFID menggunakan komunikasi serial

1. Buat project Java menggunakan Netbeans
2. Import library RXTXcomm.jar



3. Buat program seperti di bawah ini

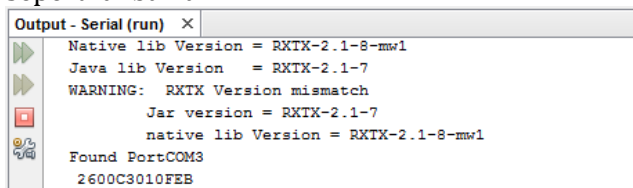
```
1 package serial;
2
3 /**
4  * Program Komunikasi Serial
5  * By Ahmad Zainudin
6  */
7 import java.io.*;
8 import java.util.*;
9 import gnu.io.*;
10
11 public class Serial {
12     static Enumeration portList;
13     static CommPortIdentifier portId;
14     static String messageString = "Hello Word!";
15     static SerialPort serialPort;
16     static OutputStream outputStream;
17     static boolean outputBufferEmptyFlag = false;
18     static InputStream input;
19
20     public static void main(String[] args) throws IOException{
21         boolean portFound = false;
22         String defaultPort = "COM3";
23
24         if(args.length > 0){
25             defaultPort = args[0];
26         }
27         portList = CommPortIdentifier.getPortIdentifiers();
28         while(portList.hasMoreElements()){
29             portId = (CommPortIdentifier)portList.nextElement();
30
31             if(portId.getPortType() == CommPortIdentifier.PORT_SERIAL){
32                 if(portId.getName().equals(defaultPort)){
33                     System.out.println("Found Port"+defaultPort);
34
35                     portFound = true;
36
37                     try {
38                         serialPort = (SerialPort)portId.open("SimpleWrite", 2000);
39                     } catch (PortInUseException e) {
40                         System.err.println("Por in use");
41                         continue;
42                     }
43                     try {
44                         outputStream = serialPort.getOutputStream();
45                     } catch (IOException e) {
46                     }
47                     try {
48                         serialPort.setSerialPortParams(9600, serialPort.DATABITS_8, serialPort.STOPBITS_1, serialPort.PARITY_NONE);
49                     } catch (UnsupportedCommOperationException e) {
50                     }
51                     try {
52                         serialPort.notifyOnOutputEmpty(true);
53                     } catch (Exception e) {
54                         System.out.println("Error setting event notification");
55                         System.out.println(e.toString());
56                         System.exit(-1);
57                     }
58                 }
59             }
60         }
61     }
62 }
```

```

57
58         input = serialPort.getInputStream();
59         while (true) {
60             while (input.available() > 0) {
61                 System.out.print((char) (input.read()));
62             }
63         }
64     }
65 }
66
67
68     if (!portFound) {
69         System.out.println("port"+defaultPort+ "not found");
70     }
71
72     serialPort.close();
73     System.exit(1);
74 }
75
76 }
77

```

4. Pastikan port serial yang digunakan sesuai
5. Jalankan program dan dekatkan tag RFID pada reader dan pada output terminal akan muncul seperti di bawah ini



The screenshot shows the 'Output - Serial (run)' window of an IDE. It displays the following text:

```

Native lib Version = RXTX-2.1-8-mw1
Java lib Version = RXTX-2.1-7
WARNING: RXTX Version mismatch
Jar version = RXTX-2.1-7
native lib Version = RXTX-2.1-8-mw1
Found PortCOM3
2600C3010FEB

```

6. Gunakan 3 tag RFID yang berbeda untuk mencobanya