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## How to Run the File(s)

1. Copy/Download the java files
2. Open Eclipse
3. If you do not have a workspace available, create a workspace.
4. Create a new Java Project. It does not matter what it is called, we just need a place to put the files so they can run
5. Copy the java files into the src folder within the project
6. Open all 3 files
7. Change Port numbers, file location, host name/IP address accordingly

Within the DirectoryServer.java file, change the below line to your desired port. In our case it is 20170.

```

23         public static void main(String[] args) throws Exception {
24
25             // Create Socket
26             DatagramSocket serverSocket = new DatagramSocket(20170);

```

Within P2PClient.java file, change the below to the IP address or host name of the computer running the directory server.

```

58             // dirc server ip goes here
59             InetAddress IPAddress = InetAddress.getByName("ENG201-05");

```

Also within the P2PClientr, change numbers 20170 and 20175 to the respective port numbers. The 20170 is the port number for the Directory Server while 20175 is for the P2PServer.

```
34             String IPAddress = RequestJpg(jpgName, 20170);
35             ConnectToHost(IPAddress, jpgName, 20175);
36
37             IPAddress = RequestJpg(jpgName2, 20170);
38             ConnectToHost(IPAddress, jpgName2, 20175);
```

In the P2PServer file, change the below to reflect that of the path you want to save the pictures in

```
106             // Location of file on computer
107             bimg = ImageIO.read(new File("H:\\CPS 706\\"+jpgName));
```

Also change the port numbers below

```
29             // Send name of jpg to Directory servers via UDP
30             InformAndUpdate("pingu.jpg", 20170);
31
32             //Do another inform and update for a second picture
33             InformAndUpdate("NOOT.jpg", 20170);
34
35             // Wait for Client to connect via TCP
36             TCPServer(20171);
37             TCPServer(20171);
```

8. Run the DirectoryServer.java file first, followed by the P2PServer.java file and then finally the P2PClient.java file
9. Assuming nothing breaks, the client computer will have X amount of pictures of however many it requested