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# **Work summary**

**Oskar Mendel**: For problem 1 Oskar implemented the parseRQ method. For the remaining part of the assignment we worked through pair programming where we programmed using one computer and taking turns writing code while other other group member gave pointers and ideas.

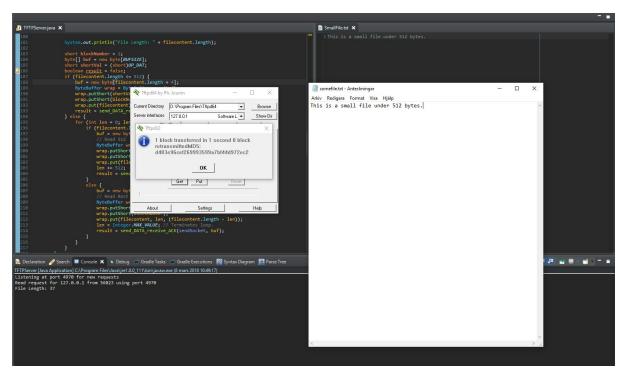
**Jesper Bergström**: For problem 1 Jesper implemented the readFrom method. For the rest of the assignment we worked with pair programming, same as above.

Work evaluation:

Oskar Mendel: 51% (Merged git conflicts in problem 1)

Jesper Bergström: 49%

## **Problem 1**



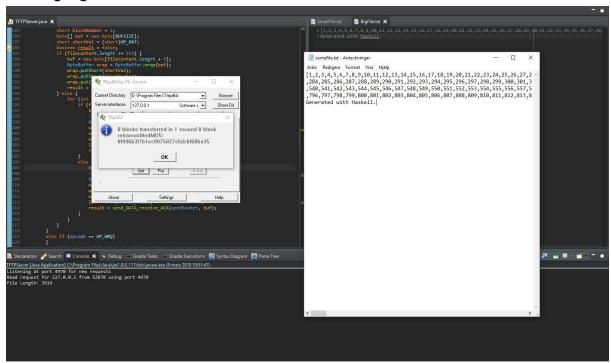
explain in your report why we used both socket and sendSocket

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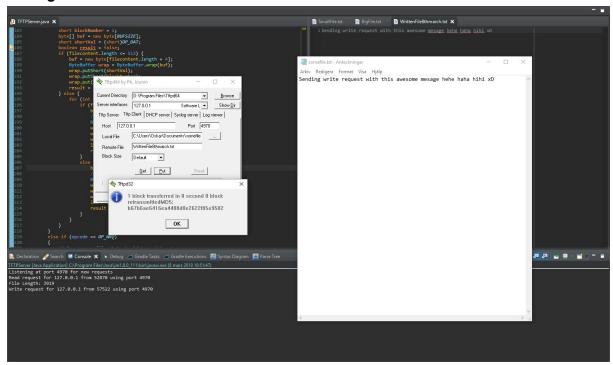
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# **Problem 2**

## Reading big file:



### Writing file to server:



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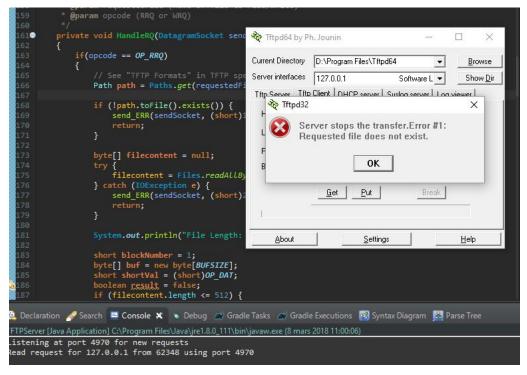
## **Problem 3**

#### Error code: 0

```
Tftpd64 by Ph. Jounin
                                                                      Current Directory D:\Program Files\Tftpd64
                                                                                                                         -
                                                                                                                                  <u>B</u>rowse
                                        // Connect to client
sendSocket.connect(cl
                                                                     Server interfaces 127.0.0.1
                                                                                                               Software L ▼
                                                                                                                                  Show Dir
                                                                      Tftp Server | Tftp Client | DHCP server | Suslog server | Log vjewer |
                                         System.out.printf("%
                                                                                  Tftpd32
                                                                                                                           X
                                                  (reqtype == clientAddres
                                                                        Host 12
                                                                                           Server stops the
                                                                        Local File
                                                                                           transfer.Error #0: Invalid
                                            (reqtype == OP_RR(
                                                                        Remote Fil
                                             requestedFile.in
HandleRQ(sendSoc
                                                                                                      OK
                                                                        Block Size
                                                                                          <u>G</u>et
                                                                                                    <u>P</u>ut
                                              requestedFile.in
                                             HandleRQ(sendSoc
                                                                            About
                                                                                                     <u>S</u>ettings
                                                                                                                                 Help
                                         sendSocket.close();
                                    catch (SocketException e)
                                        {e.printStackTrace();}
📴 Declaration 🖋 Search 📮 Console 🗶 🐧 Debug 🧝 Gradle Tasks 🚙 Gradle Executions 竭 Syntax Diagram 💹 Parse Tree
TFTPServer [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (8 mars 2018 10:58:44)
Listening at port 4970 for new requests
Read request for 127.0.0.1 from <u>Invalid</u>
57853 using port 4970
```

We temporarily changed the opcode to an unknown one in order to generate error code 0.

### Error code: 1



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### Error code: 2

```
ap.put(filecontent, len, 512);
                                           result = send_DATA_receive_ACK(sendSocket, buf);
                                                                         Tftpd64 by Ph. Jounin
                                          buf = new byte[(file
                                                                         Current Directory D:\Program Files\Tftpd64
                                                                                                                                            <u>B</u>rowse
                                          wrap.putShort(short)
                                                                         Server interfaces 127.0.0.1
                                                                                                                                           Show <u>D</u>ir
                                                                                                                       Software L ▼
                                          wrap.putShort(blockN
                                                                           Tftp Server Tftp Client DHCP server Sustan server Lon viewer
                                          wrap.put(filecontent,
len = Integer.MAX_VAL
result = send_DATA_re
                                                                                    Tftpd32
                                                                             Host
                                                                                             Server stops the transfer.Error
                                                                                             #2: Failed to read from file.
                                                                             Remo
                    }
else if (opcode == OP_WRQ)
                                                                                                             0K
                                                                             Block
                         // Create new file that should b
Path path = Paths.get(requestedF
                                                                                                           <u>P</u>ut
                          if (path.toFile().exists()) {
                               send_ERR(sendSocket, (shor
                                                                                 About
                                                                                                            <u>S</u>ettings
                                                                                                                                          <u>H</u>elp
                               path = Files.createFile(path);
byte[] buf = new byte[BUFSIZE-4];
🙎 Declaration 🖋 Search 📮 Console 🗶 😮 Debug 🏿 Gradle Tasks 🦼 Gradle Executions 🔞 Syntax Diagram 🚨 Parse Tree
FTPServer [Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (8 mars 2018 11:00:06)
istening at port 4970 for new requests
Read request for 127.0.0.1 from 62348 using port 4970
Read request for 127.0.0.1 from 60010 using port 4970
```

We gave admin only access to the BigFile.txt to trigger this error.

### Error code: 6

```
ep.putShort(blockNumber);
wrap.put(filecontent, len, (filecontent.length - len));
len = Integer.MAX_VALUE; // Terminates loop.
result = send_DATA_receive_ACK/sendo.
                                                                                          Tftpd64 by Ph. Jounin
                                                                                          Current Directory D:\Program Files\Tftpd64
                                                                                                                                                                        Browse
                         else if (opcode == OP_WRQ)
                                                                                          Server interfaces 127.0.0.1
                                                                                                                                                Software L ▼
                                                                                                                                                                    Show <u>D</u>ir
                                // Create new file that should b
Path path = Paths.get(requestedF
                                                                                          Tftp Server | Tftp Client | DHCP server | Syslog server | Log viewer |
                                                                                             Host 127.0.0.1
                                                                                                                                                    Port 4970
                                if (path.toFile().exists()) {
                                                                                                                \Users\Oskar\Documents\somefile.txt
                                                                                             Local File
                                                                                                                BigFile.txt
                                                                                             Remote File
                                                                                             Block Size
                                                                                                                Default
                                                                                                                                 •
                                                                                                                                              Tftpd32
                                      path = Files.createFile(path)
byte[] buf = new byte[BUFSIZE
                                                                                                                   <u>G</u>et <u>P</u>ut
                                                                                                                                                         Server stops the transfer.
                                                                                                                                                         Error #6: File already exists.
                                       // Start with sending ack t
send_ACK_Zero(sendSocket);
                                                                                                                                                                          OK
                                                                                                  About
                                                                                                                                   Settings
                                             String content = new String(buf);
Files.write(path, content.trim().getBytes(), StandardOpenOption.APPEND);
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TFTPServer[Java Application] C:\Program Files\Java\jre1.8.0_111\bin\javaw.exe (8 mars 2018 11:00:06)
Listening at port 4970 for new requests
Read request for 127.0.0.1 from 62348 using port 4970
Read request for 127.0.0.1 from 60010 using port 4970
Write request for 127.0.0.1 from 53277 using port 4970
```