Computer Networks

Submit the ServerProcesses.java file on webcampus

Grading:

Grade	Work
80	You didn't do anything or submit something too difficult to grade
85	You made some change to the code
92	You made an interesting change to the code
100	You made an very interesting unique change to the code

Write multithreaded code that will simulate a message server that routes messages to processes that can handle the message and wakes up processes to handle the message.

Go to the class page and copy the code called ServerProcesses.java

Launch NetBeans (on university computer and can be downloaded for free on your laptop)

- Create a project called "ServerProcesses"
- Copy and paste this code in and play run it
- Try to understand why the output does what it does

The code starts 3 threads.

- IncomingMessageThread – which simulates the process that receives all messages routed to a computer for the network. Reads the port and message and routes the message to the process that handles all messages for that port.
- The incomingMessageThread will ask you 2 questions
    o Enter port
    o Enter message
- httpThread – simulates an unencrypted web server
- httpsThread – simulates an encrypted web server
- If the user (you) enters a message for the http port, the http thread will wake up an print the message
- If the user (you) enters a message for the https port, the https thread will wake up an print the message
- If the user (you) enters a message for any port that is not in service, the incomingMessageThread will tell you that the service is not running.

For example, run the code and enter 'http' for the port and 'Hello' for the message, and see what happens. The enter 'ftp' for the port and 'Login' for the message and see what happens.

Assignment

Make some meaningful change to this code (unique from the others in the class) that demonstrates your understanding of how this code works.

Change my name to your name and add what you did like " Joe Smith – added an ftp service"