

## Lab 4 & 5

## COSC 20203 Due: Wednesday, 2 May

Spring 2023

Write a server (Lab4Server) and a client (Lab5Client) that will provide ticket costs for people who want to ride the Texas State Railroad. Prices depend on the locomotive (diesel or steam) and the type of seating.

Seat Type	Diesel	Steam
Caboose	\$850	\$950
Presidential	\$77/adult \$57/child	\$87/adult \$67/child
First Class	\$57/adult \$37/child	\$67/adult \$47/child
Open Air	\$27/adult \$22/child	\$37/adult \$32/child

If you are interested in the full list of excursions and prices, see  
<https://texasstaterailroad.net/events/>

The port for the server must be 25413.

The server must accept commands of the form

*locomotive seatType #adults #children*

where *locomotive* is either Diesel or Steam

*seatType* is Caboose or Presidential or FirstClass or OpenAir

*#adults* and *#children* are decimal numbers that are not specified for Caboose

There are one or more blanks between each part of the command.

Here are some examples:

Steam OpenAir 1 2

Diesel Caboose

Diesel Presidential 2 0

The server will return a single line response that is the total price.

All communication between client and server must use PrintWriter and BufferedReader.

**The Java programs MUST be named Lab4Server and Lab5Client.**

There is a JLabel in the client that can be used to display an error message.

If you work with a partner, submit the programs under one name with both names in the comments in the programs.