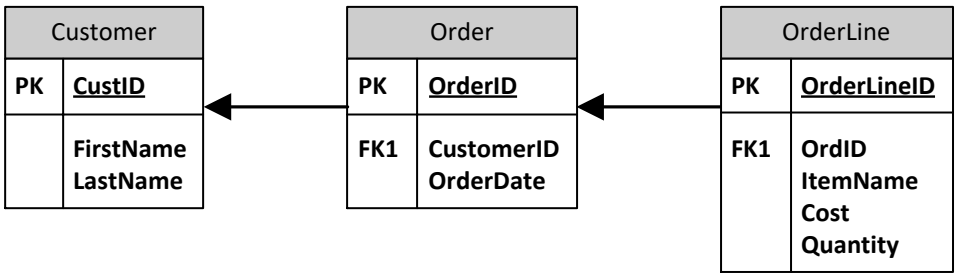
35Availity Fullstack .NET Homework Assignment

We highly recommend that you use one of the free source code management platforms (GitHub, GitLab or BitBucket) when storing your code. Once you are ready for us to look at your answers, **send us the link** to your code. If you have any questions about the homework, please do not hesitate to ask.

Note: If you have experience writing unit tests, please incorporate unit tests into the coding exercises below.

1. Tell me about your proudest professional achievement. It can also be a personal or school project.
2. Tell me about something you have read recently that you would recommend and why. (Can be a Github Repo, Article, Blog, Book, etc)
3. How would you explain to your grandmother what Availity does?
4. Coding exercise (using C#): You are tasked to write a checker that validates the parentheses of a LISP code. Write a program which takes in a string as an input and returns true if all the parentheses in the string are properly closed and nested.
5. Coding exercise (using Angular, React, or a JavaScript framework of your choice): Healthcare providers request to be part of the Availity system. Create a registration user interface so healthcare providers can electronically join Availity. The following data points should be collected:
    - First and Last Name
    - NPI number
    - Business Address
    - Telephone Number
    - Email address
6. Coding exercise (using C#): Availity receives enrollment files from various benefits management and enrollment solutions (I.e. HR platforms, payroll platforms). Most of these files are typically in EDI format. However, there are some files in CSV format. For the files in CSV format, write a program that will read the content of the file and separate enrollees by insurance company in its own file. Additionally, sort the contents of each file by last and first name (ascending). Lastly, if there are duplicate User Ids for the same Insurance Company, then only the record with the highest version should be included. The following data points are included in the file:
    - User Id (string)
    - First and Last Name (string)
    - Version (integer)
    - Insurance Company (string)
7. This database diagram is to be used for the questions that follow:



    a. Write a SQL query that will produce a reverse-sorted list (alphabetically by name) of customers (first and last names) whose last name begins with the letter ‘S.’

b. Write a SQL query that will show the total value of all orders each customer has placed in the past six months. Any customer without any orders should show a $0 value.
c. Amend the query from the previous question to only show those customers who have a total order value of more than $100 and less than $500 in the past six months.

Again, please let us know if you have any questions. Thanks!

-Availity Team