ITDEV-140

Assignment 7

Using your Java development environment, write a program that implements the following challenges from “Chapter 15 Programming Challenges”, and the database challenge as described.

Chapter 15 Challenge 1: Recursive Multiplication
Chapter 15 Challenge 5: Palindrome Detector
Chapter 15 Challenge 9: Ackermann’s Function

Database Challenge: Write a program that performs simple CRUD operations on an object of your choice. You can create a database using whichever service you are comfortable with (MongoDB, AWS RDS, Azure SQL, or any local or remote database). Create a table for your object, for example “Employee”, that contains columns associated with the object. For example “EmployeeID, EmployeeFirstName, EmployeeLastName, HireDate”... etc. Write a program that demonstrates the following:

- C) Creating a new record
- R) Reading a record into your program for display
- U) Updating an existing record
- D) Deleting a record

Here is a link to a tutorial on connecting to MongoDB with a Java console application: https://developer.mongodb.com/quickstart/java-setup-crud-operations/

I highly recommend taking a look at that tutorial and using MongoDB as your persistence layer if you don’t already have access to a database environment.

When you have completed your programming, produce a video walkthrough of your completed work. Walk me through your code and demonstrate the successful execution of each challenge. Upload your video to your repository of choice (YouTube, Vimeo, Google Drive, etc.). Be sure to share it with me: cribbm@matc.edu, then submit a link to the video in Blackboard.

Please note, videos should be succinct. Show me that the program works and highlight important areas of the code such as the implementation of classes, methods, and/or algorithms. You do not need to explain every line of code.