1. Select **five** methods from the **String JavaDocs** and describe the following for each:
   a. That is the method signature?
   b. What does the method do?
   c. Why would this method be useful (how could you use it)?

The charAt() method has a signature of **public char charAt(int index).** Its use is to return the character at the passed in index. This would be useful to retrieve a user's initials, from their first and last name.

The charconcatAt() method has a signature of **public String concat(String str).** This concatenates the passed in string to end of the String used to call the method. This would be useful to create full names, email addresses or URLs.

The split() method has a signature of **public String split(String regex)**& **public String split(String regex, int limit)**   This splits a string based on a character or index. This would be useful to store values of the string arrays or get rid of character you don't want. For example if we import a csv we likely don't want the commas

The length() method has a signature of **public int length()**. This returns the length of the string it is called with. This would be useful for getting average name length (something we have done in class) or maybe checking password input to make sure it is more than 10 characters

The toUpperCase() method has a signature of **public String toUpperCase()** & **public String toUpperCase(Locale locale).** This changes all the characters in the string to upper case. This would be useful for keeping things consistent. For instance, a user may enter 'mT' and another "MT". In order to keep things consistent, we could run this method on the 2nd.

2. What is your favorite thing you learned this week?

My favorite I learned or relearned this week is methods. I think for me this is where I really fell in love with coding previously. I love that makes things more readable, reusable, and more maintainable. I would love to be able to implement at my current employer, as most of our programs have just been added and added to over 25 years. It makes things painful to change and test. Methods (or subroutines as I know them in RPG) help to mitigate this.

Sources

https://www.geeksforgeeks.org/java-string-charat-method-example/
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