CS/SE 2S03 Tutorial #5 Exercises

1. Consider the following string:

   ```
   String hannah = "Did Hannah see bees?  Hannah did.";
   ```

   a. What is the value displayed by the expression `hannah.length()`?

   b. What is the value returned by the method call `hannah.charAt(12)`?

   c. Write an expression that refers to the letter `b` in the string referred to by `hannah`

2. How long is the string returned by the following expression? What is the string?

   ```
   "Was it a car or a cat I saw?".substring(9, 12)
   ```

3. Write a program that asks the user for relevant information (indicated by the upper case words below) in order to print the following horoscope for the user:

   ```
   Expect bad news, NAME.
   Your manager, MANAGER, is not happy with WHATEVERYOUDO,
   and is planning to move you to the DEPARTMENTNAME department.
   Your salary will be reduced by PERCENT%.
   But your manager also has a surprise coming:  SURPRISE.
   ```

4. Write a program that reads a line of text from the keyboard, and prints an acronym formed from the first letter of the word.

   Example:

   ```
   Enter a line of text:  Just another valuable artifact
   JAVA
   ```

Table of String Functions

```
public class String  (Java string data type)

                String(String s)             create a string with the same value as s
        int  length()                        string length
       char  charAt(int i)                   ith character
     String  substring(int i, int j)         ith through (j-1)st characters
    boolean  contains(String sub)            does string contain sub as a substring?
    boolean  startsWith(String pre)          does string start with pre?
    boolean  endsWith(String post)           does string end with post?
        int  indexOf(String p)               index of first occurrence of p
        int  indexOf(String p, int i)        index of first occurrence of p after i
     String  concat(String t)                this string with t appended
        int  compareTo(String t)             string comparison
     String  replaceAll(String a, String b)  result of changing as to bs
   String[]  split(String delim)             strings between occurrences of delim
    boolean  equals(String t)                is this string's value the same as t's?
```

http://introcs.cs.princeton.edu/java/11cheatsheet/