Review on String Parsing and Loops

Strings

1.)
   a.) What type does the method `length` return? _______
   
   b.) What type does the method `substring` return? _______
   
   c.) What type does the method `indexOf` return? _______
   
   d.) What type does the method `charAt` return? _______

2.) Suppose you have the variable `myString` of type `String` with data “Go Tar Heels! Beat Dook!” Write out the data stored in `myString` and place the index of each character below the string. (See page 77 if you have questions)

3.) Give the return type and data of the following method calls on `myString` (defined in question 2).
   a.) `myString.length();`

   b.) `myString.trim();`

   c.) `myString.substring(7);`

   d.) `myString.indexOf("!");`

   e.) `myString.lastIndexOf(" ");`
Loops

4.) What is the value of temp at the end of the loop for the following input? _______
   4 6 2 7 6 4 1 9 8 -1
   
   System.out.print("Please input an int: ");
   int input = kb.nextInt();
   int temp = 0;
   while (input > 0)
   {
      if(input > 5)
         temp++;
      System.out.print("Please input an int: ");
      input = kb.nextInt();
   }

   What is a better name for temp (Think about what the program is doing)? _______

5.) What is the value of temp at the end of the loop for the following input?_______
   3 5 -1 7 4 10 4 10 6
   
   System.out.print("Please input an int: ");
   input = kb.nextInt();
   int temp = input;
   for(int i = 0; i < 7; i++)
   {
      if(input > temp)
         temp = input;
      System.out.print("Please input an int: ");
      input = kb.nextInt();
   }

   What is a better name for temp (Think about what the program is doing)? _______

6.) What is the value of temp at the end of the loop for the following input? _______
   4 7 2 8 4 5 9 1 1 3 -1
   
   int temp = 0;
   do
   {
      System.out.print("Please input an int: ");
      input = kb.nextInt();
      temp += input;
   }while(input > 0);

   What is a better name for temp (Think about what the program is doing)? _______