

Java Programming

3-1: String Processing

Practice Activities

Lesson Objectives:

- Read, search, and parse strings.
- Use StringBuilder to create strings.

Vocabulary:

Identify the vocabulary word for each definition below.

	Dividing a string into a set of sub-strings.
	A class that represents a string-like object, but unlike a string can be modified using methods such as appends.
	A method inside the String class that parses a string by a specified character or, if unspecified, by spaces.

Try It/Solve It

1. Imagine that you arrive at school and your teacher declares that it is backwards day, and anything you request to say to her must be written down in reverse. You decide to write a method that takes in a string and generates and prints the string backwards to the string so you may communicate with your teacher. Complete the method below so it works as intended.

```
public void backwardsDay(String original){
    String backwards = "";
    for(int i=    ){

        } //endfor
    System.out.println(backwards);
} //end method backwardsDay
```

2. Would the method you completed in problem 1, assuming it works properly, also work for converting the backwards messages that the teacher gives you into forwards, readable messages? Why or why not?
3. What is the major difference between making modifications to a String and a StringBuilder?
4. Complete the following method so that it works as intended. The below method takes in a String as a parameter and returns the reverse of the String.

```
public String reverse(String str){  
    String strRev = "";  
    for(int i=____; ____; ____)  
        strRev+=str.charAt(____);  
    //endfor  
    return strRev;  
}
```

5. In some situations it is easier to use a StringBuilder instead of a String. Create a program that does the same as Q4 (reverses some text) but use a StringBuilder and one of its methods to accomplish the task.