

Printing a String Backwards

Printing a string backwards can be done iteratively or recursively. To do it recursively, think of the following specification:

If s contains any characters (i.e., is not the empty string)

- ☐ print the last character in s
- ☐ print s' backwards, where s' is s without its last character

File *Backwards.java* contains a program that prompts the user for a string, then calls method *printBackwards* to print the string backwards. Save this file to your directory and fill in the code for *printBackwards* using the recursive strategy outlined above.

```
// *****

//   Backwards.java

//

//   Uses a recursive method to print a string backwards.

// *****

import java.util.Scanner;


public class Backwards

{

    //-----

    // Reads a string from the user and prints it backwards.

    //-----

    public static void main(String[] args)

    {

        String msg;

        Scanner scan = new Scanner(System.in);


        System.out.print("Enter a string: ");
```

```
msg = scan.nextLine();

System.out.print("\nThe string backwards: ");
printBackwards(msg);
System.out.println();
}

//-----
// Takes a string and recursively prints it backwards.
//-----
public static void printBackwards(String s)
{

    // Fill in code

}
}
```