ECE20016 JAVA PROGRAMMING LANGUAGE

Check your attendance – it matters!

- Quizo9 is available 3.0 points
 - by Saturday May 3, 10:55 PM
- LiveLab Programming Exercises for chapter 9
 - 9.23 & 9.27 (1.0 point each)
 - by Saturday May 3, 10:55 PM
- Chapter 9 Strings
- Chapter 10 Thinking in Objects

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- Midterm makeup 1
 - May 1 (today)
- Midterm makeup 2
 - when?
- Class Circle review

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- Midterm makeup 1
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- Midterm makeup 2
 - when?
- Class Circle review
- Homework for Chapter09
 - Individual assignment
 - 3 points
 - Due May 10, Saturday 11:55 pm
 - Checklist Read instructions carefully

Midterm makeup

Class Circle

```
public class CircleDriver {
  public static void main(String[] args) {
    Circle myCircle = new Circle ();
    System.out.println("myCircle: radius=" + myCircle.getRadius());
    Circle urCircle = new Circle (10.0);
    urCircle.setRadius (1.0);
    System.out.println ("myCircle: " + myCircle.toString());
    System.out.println ("urCircle: " + urCircle.toString());
    if
      System.out.println ("Equal: its area is " + myCircle.getArea());
    else
      System.out.println ("Unequal");
    System.out.println("Number Of Objects:
                                                       getNumberOfObjects());
```

Midterm makeup

Class Circle

```
public class Circle {
 private static final double DEFAULT RADIUS = 1.0;
 private double radius = DEFAULT RADIUS;
 private static int numberOfObjects = 0;
  /** Construct a circle with DEFAULT RADIUS */
 public Circle() {
  /** Construct a circle with a specified radius */
 public Circle(double newRadius) {
    radius = newRadius > 0 ? newRadius : DEFAULT RADIUS;
   Circle.numberOfObjects++;
  // place other methods here .....
```

Midterm makeup

Class Circle

```
public class Circle {
 private static final double DEFAULT RADIUS = 1.0;
 private double radius = DEFAULT RADIUS;
 private static int numberOfObjects = 0;
  // constructors comes here.....
 public double getRadius() { return this.radius; }
  public void setRadius(double newRadius) {
    this.radius = (newRadius >= 0) ? newRadius : DEFAULT RADIUS;
 public static int getNumberOfObjects() { return numberOfObjects };
 public double getArea() { return radius * radius * Math.PI; }
 public String toString () { return "Circle: radius = " + radius; }
 public boolean equals(Object o) {
    return radius == ((Circle)o).getRadius();
```

Description:

Write a program that reads a string (XYZ or a word) from the keyboard. The program should then construct a URL for http://www.XYZ.org/, replacing XYZ with the string read in.

Then **print** the first ten lines of the Web page at that URL in REVERSE ORDER; i.e., the tenth, ninth, ..., and first lines.

Check whether or not it has its website name in the first ten lines. Identify ten org websites which have their names in the first ten lines or not, respectively, five websites each.

Specification:

To receive credit for this problem, you must follow these directions exactly:

- 1. Your solution must be in a file called **OpenOrg**학번앞두자리끝세자리이름**.java**.
 Don't use a package name as in Eclipse. (otherwise, 0.5 point)
- 2. Do not edit any of the lines before the line that says "Replace this comment with your solution. (otherwise, -0.5 point)
- 3. Your program must print only ten lines from the given home page, and must print them in reverse order. Do not add any extraneous println() statements. Do not modify the lines before printing them. (- 2.5 point)
- 4. Use the **URL** class which provides openStream() method to access a web page. openStream() Opens a connection to this URL and **returns an InputStream** for reading from that connection. Refer to java.net.URL and **Chapter 14** of your text. It will guide where to start.
- 5. Use the **for** loop as needed.
- 6. Use a named constant if needed.
- 7. Use an array of **String** objects to store the lines read from the web page.
- 8. Lastly it prints the line number which contains XYZ again if found. **The search should be case-insensitive**. If not found, let the user know that there is no such line in the first 10 lines.

How to start

The program skeleton I've given you prints a prompt before reading the String; don't change this prompt. When you do this homework, do it incrementally. First try to open the web page first.

Then just print one line and so on. You may implement the web site name search at the last.

Your program must produce EXACTLY the same output as our solution.

No partial credit will be given for programs that don't produce a portion of a Web page.

Hint: Our textbook (Chapter 9 & 14) will be a good source to start this program.

Checklist:

- 1. In your comment section of the source file, list your five ~.org websites with a line description of the organization you were able to access and found their web site name in the first ten lines. Do the same thing for another five ~.org websites that you did not find their website name in the first 10 lines. (otherwise -0.5 point)
- 2. Submit your source file in Piazza hw9 folder. (otherwise -0.5 point)
- 3. Warning: make sure your code compiles and runs on the command line right before you submit it. Every semester, we get dozens of submissions that don't even compile. Don't make "a tiny last-minute change" and assume your code still compiles. You will not receive sympathy for code that "almost" works. If you only manage to do one of the problems before the deadline, you still need to turn it in. However, don't turn it in if it does not compile and run. (otherwise -3.0 points)

OpenOrg.java

```
import java.net.URL;
import java.io.*;
public class OpenOrg13123KimHandong {
  public static void main(String[] arg) throws Exception {
    BufferedReader keyboard;
    String inputLine;
    keyboard = new BufferedReader(new InputStreamReader(System.in));
    System.out.print("Enter the name of a organization (w/o spaces): ");
    System.out.flush(); // Make sure the line is printed immediately.
    inputLine = keyboard.readLine();
    /* Replace this comment with your solution. */
```