

**Java Program: File System****Setup**

1. Be sure Java and Eclipse are installed. In Eclipse go to File/New/Java Project.
2. Name it (with no spaces): **Program5YourlastnameYourfirstname**
3. Go to File/New/Class name it the exact same as the project
4. Import the following:

```
import java.util.Scanner;
import java.io.PrintWriter;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.File;
```

**Lab**

1. Create a class named FileSystem; create methods in this class for each step below:
  - a. Create another file
    - i. ask the user to enter the name of a text file (.txt) and create that file
  - b. Write over text of an existing file
    - i. ask the user to enter the name of a text file (.txt)
    - ii. ask the user to enter a line of text for the file
    - iii. write that text to the file
  - c. Append (add to the end) text to a file
    - i. ask the user to enter the name of a text file (.txt)
    - ii. add that text to the file, keep the original text
  - d. Print text from a file
    - i. ask the user to enter the name of a text file (.txt)
    - ii. open the file and print the text in it to the screen
  - e. Exit program
    - i. print exiting message then exit program
2. In the main method create an interface that asks the user what they want to do from the FileSystem methods above
  - a. the options need to be in a loop to allow them to continue any of the choices above until they exit
  - b. each choice needs to be a method call to FileSystem
  - c. the user must be able to type in any file name
3. Each opening of a filestream will have to be in a try catch
  - a. Errors should be handled by telling the user the error and sending them back to the choices in #2

Use proper and clear comments//usually one comment per section of code, explain each step, pick proper variable types and use clear names for variables and methods. Include the following at the **TOP OF EACH YOUR CLASSES:**

**Name:** *Your Name*

**School:** USC Sumter

**Assignment:** Program5

**Class:** CSCE 145

**Semester:** *current semester and year*

**Date:** *date turned in*

**Grading:**

<b>Function:</b> objectives met (all options work and can be repeated over and over again)	60%
<b>Exceptions:</b> proper handling when opening file streams (try catch blocks) and returning user to options	20%
<b>Organization:</b> doc, code (variable & method names)	10%
<b>Style:</b> clear explanation (messages to user)	10%