

Configuring The JDK Logger

Starting in jdk 1.4, Sun has provided a full-featured and fully configurable logging class, called `Logger`, with the standard Java libraries. This document shows how to configure the `Logger` class that are typical for real projects.

The logging.properties file

Configuration specifications are placed by default in a file called `logging.properties` which can be found in `/jre/lib` folder in any jdk distribution. This file allows you to set up separate loggers for console display and logs stored in files; allows you to set independent levels; and allows you to specify details about how logs stored in files should be formatted and named, and where they should be stored.

You have been given a modified version of this file in the resources directory by providing both console and file logs, each with different formats.

To complete setup for this customization, follow these steps:

Setting up logging customization

1. Tell the JVM where `logging.properties` is stored by passing in a runtime argument in your main class file by doing the following steps.
 - a. Highlight Start and click Run > Run. There should be an option to choose a Run Configuration (details are different in different versions of Eclipse)
 - b. In the Main tab, name the Configuration, make sure project is same as your main class file and that main class is the full package name for Start.
 - c. In the Arguments tab, type into the VM Arguments area something like the following line: (forward slashes should be used – *no spaces*)

```
-Djava.util.logging.config.file=E:/ReMo/FPP-  
coding/Sampledemo/src/resources/logging.properties
```

```
// Make a resources folder in your src directory
```

2. Tell the LogManager where log files should be stored by modifying `logging.properties`, setting the property `java.util.logging.FileHandler.pattern` in a way that is similar to the following: (use forward slashes)

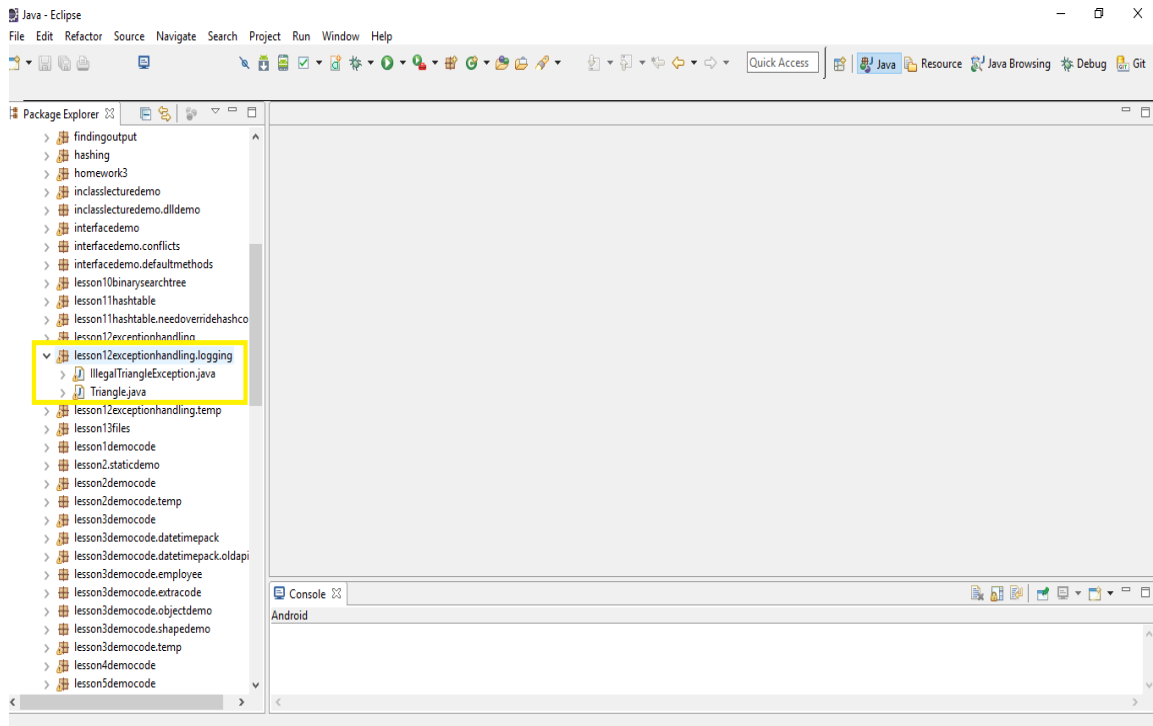
```
java.util.logging.FileHandler.pattern =  
E:/ReMo/FPP-Coding/Sampledemo/src/logs/java%u.log
```

```
// Make a logs folder in your src directory
```

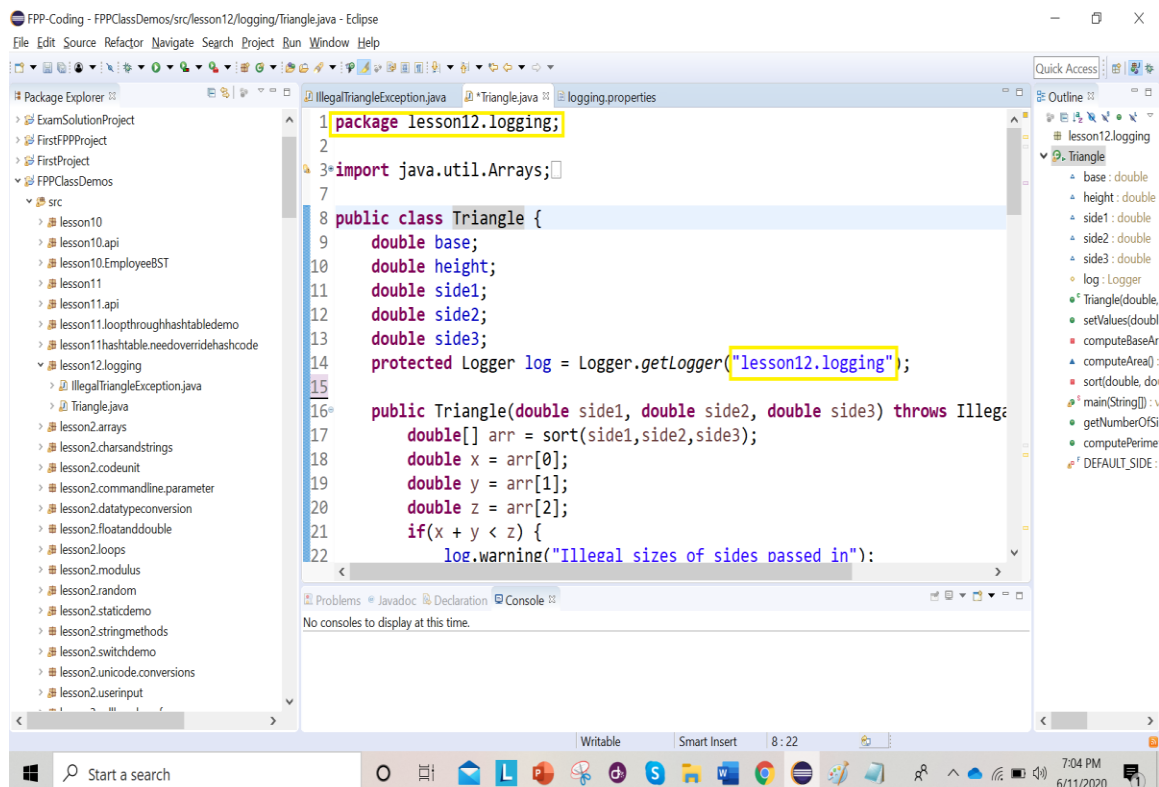
3. You can configure the appearance of log statements written either to the console or to files by specifying your own formatter.

Screen Shots

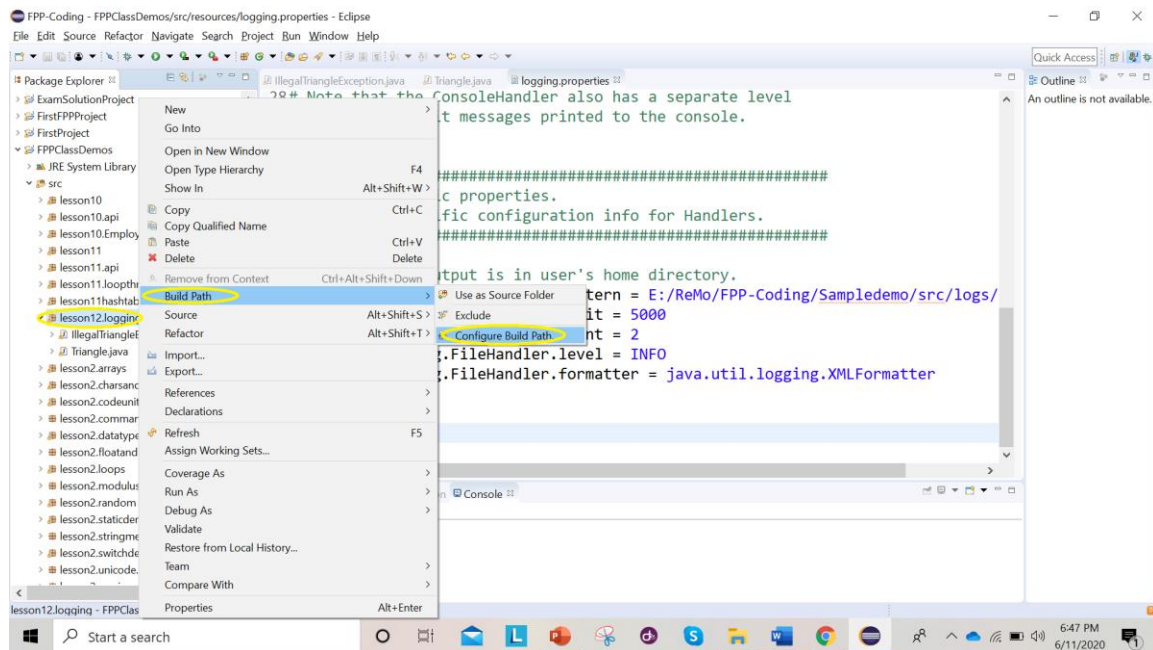
Step 1 : Create new package and copy two java files from your demo code package.



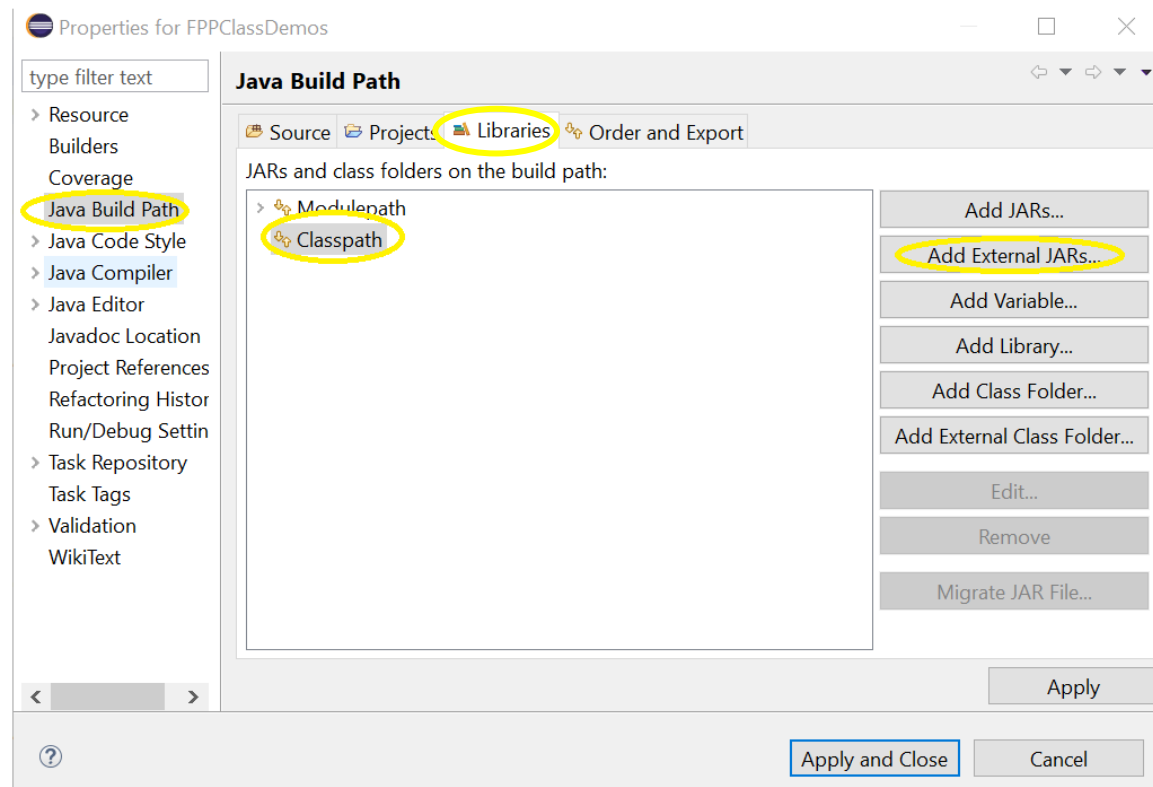
Step 2 : After copying the files, open Triangle.java and modify the line no. 14 with inside the Logger.getLogger("<your package name>") as highlighted in the below screenshot.



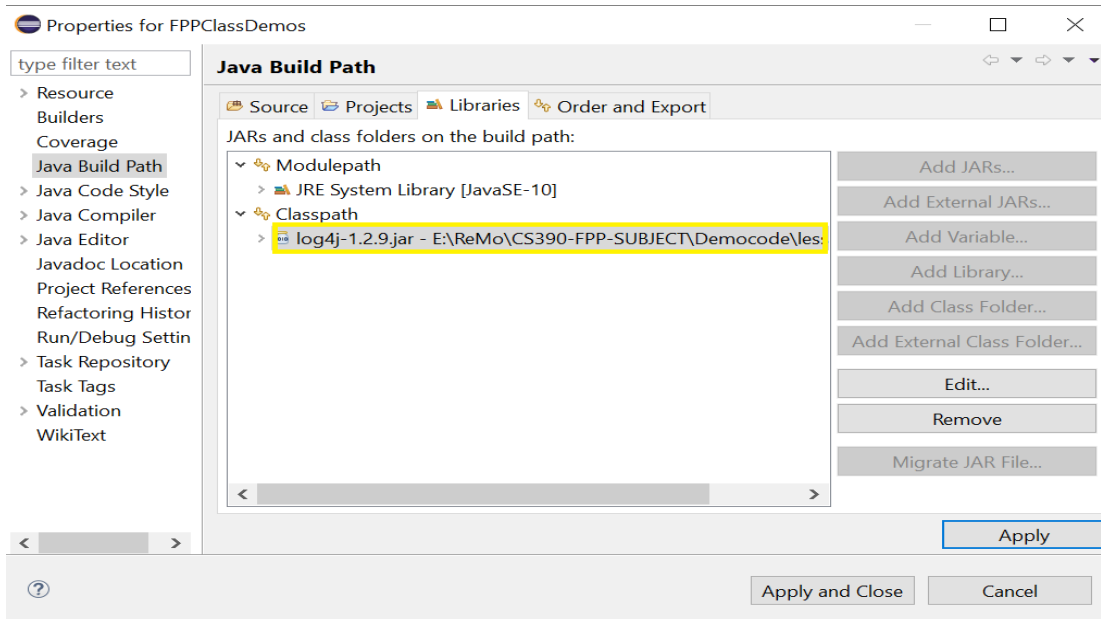
Step 3: Add the Log4j external jar file in your project. This file is available on your lesson12\logging folder. Copy that file in your system. Right click on your project and select Build Path→ Configure Build path as per the given screenshot



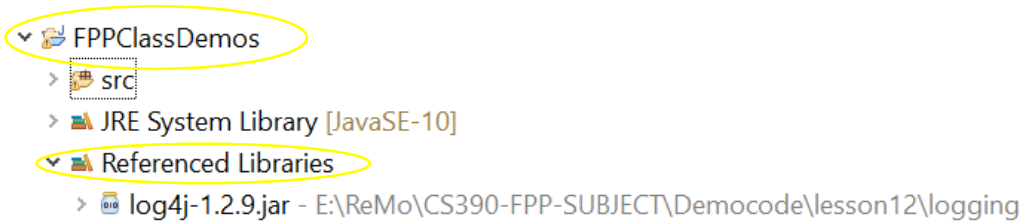
Step 4: Choose Libraries tab and select Classpath. Then click on Add External JARs button and browse the log4j jar file on your system which you copied from the demo folder.



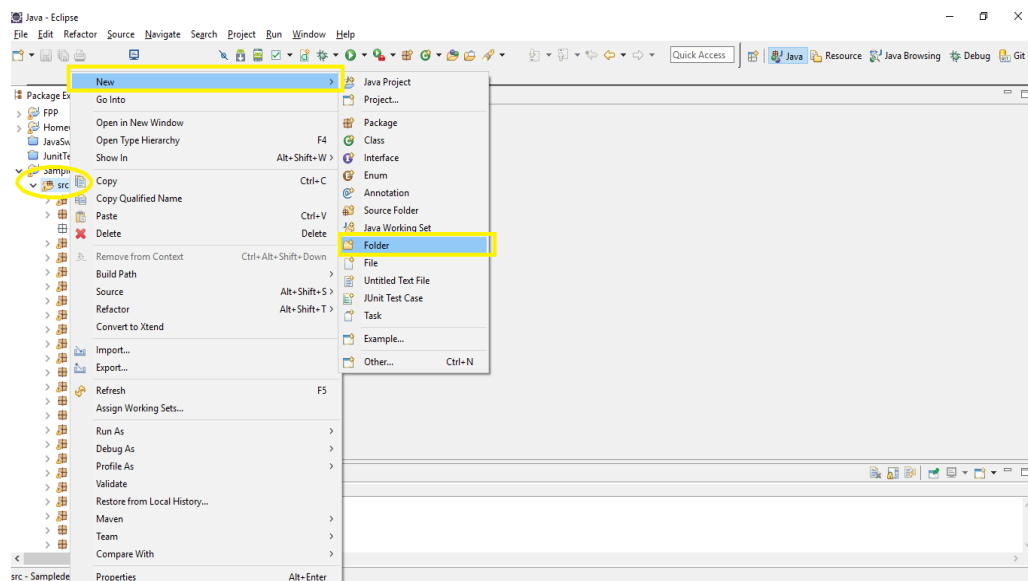
Step 5: After adding theLog4j jar file, the screen looks below and click Apply.



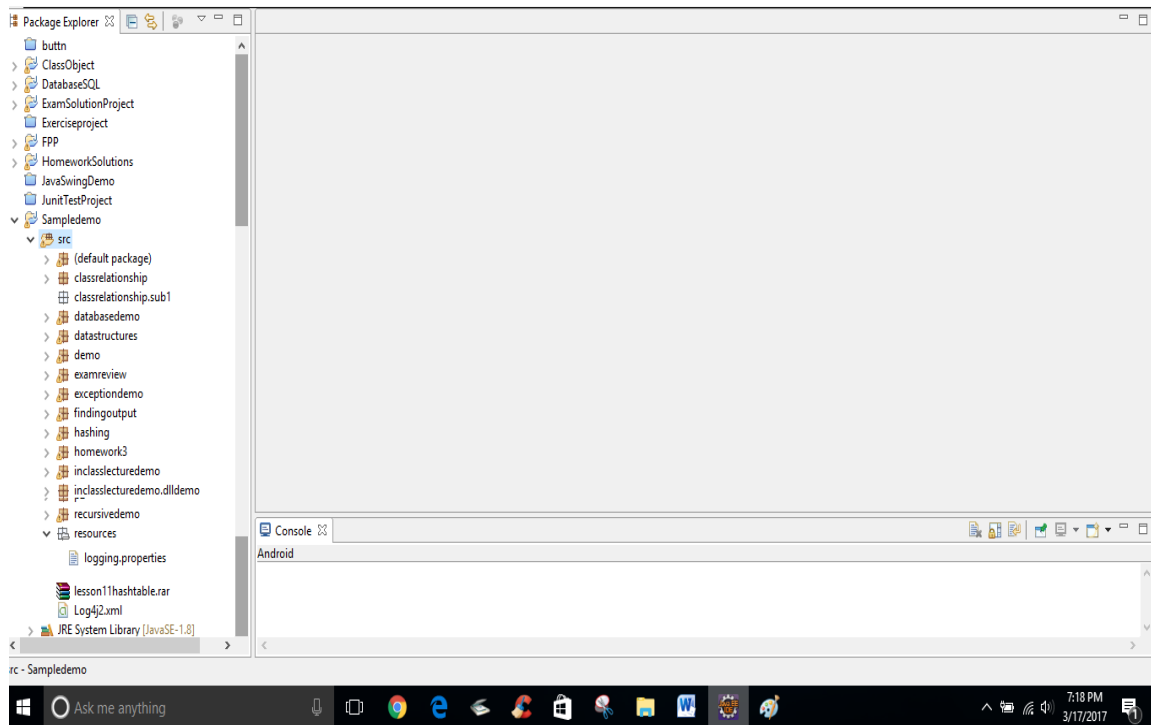
Step 6: After doing the previous step, log4j jar file added in your project under Referenced Libraries on your project.



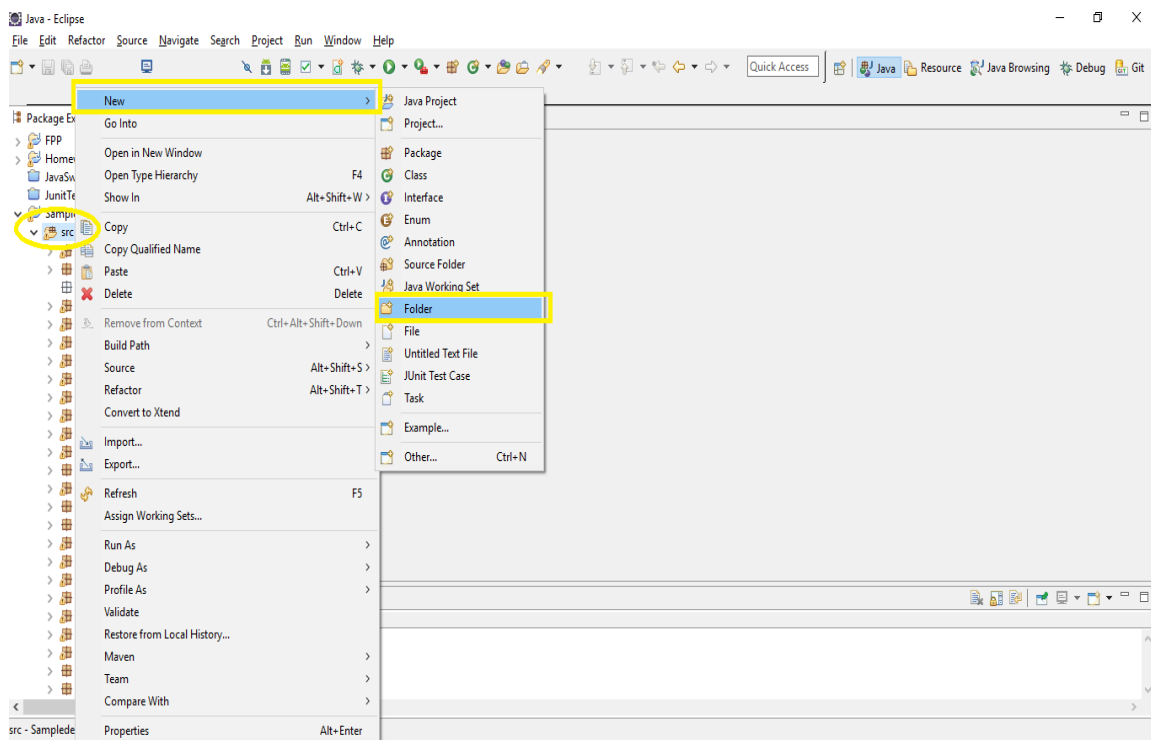
Step : 7 Create a folder named as resources under src



Step 8 : Copy logging.properties file from your lesson12 demo code and paste in your eclipse resources folder in the previous step.



Step : 9 – Create a new folder named as logs under src



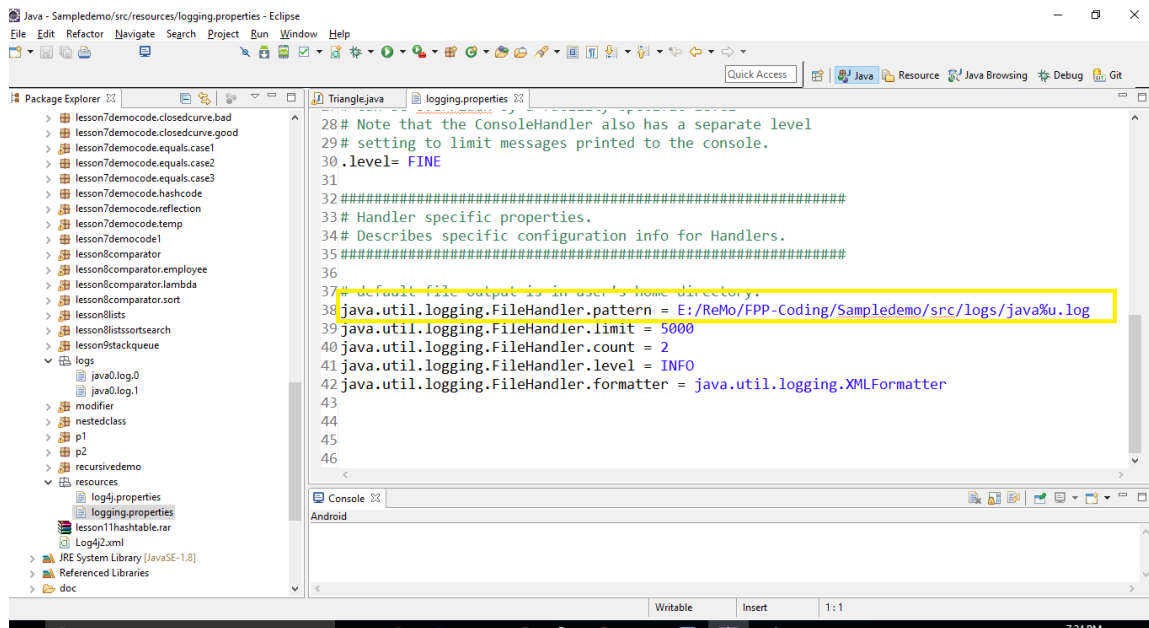
Step : 10

Tell the LogManager where log files should be stored by modifying logging.properties, setting the property by opening your logging.properties file in your eclipse.

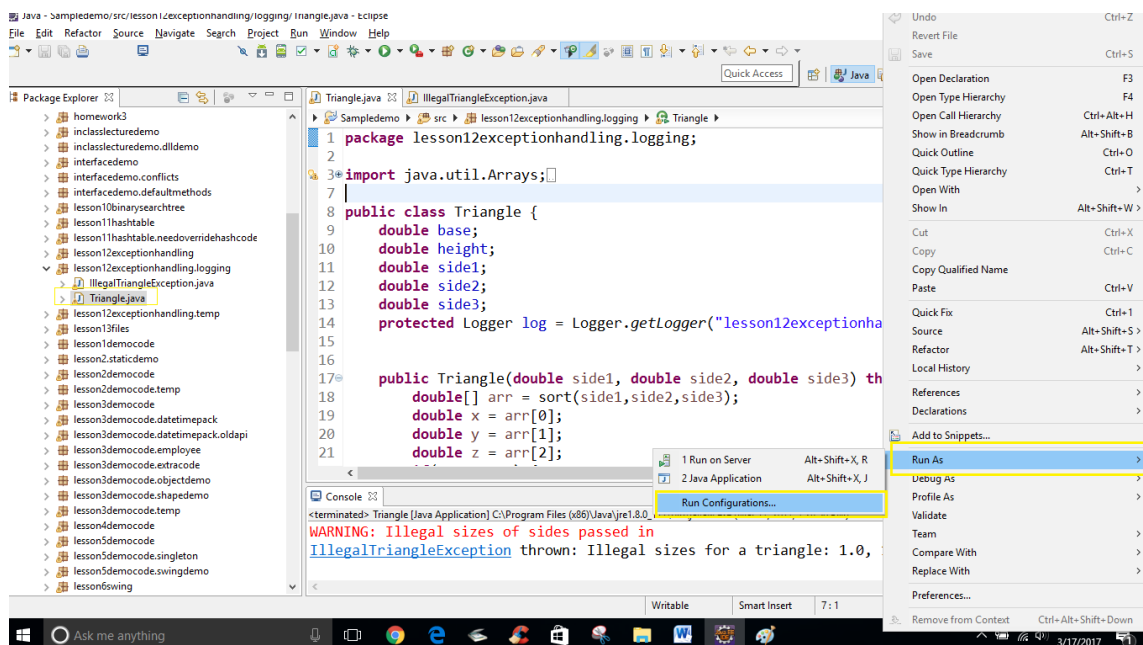
`java.util.logging.FileHandler.pattern`

in a way that is similar to the following: (use forward slashes). You can get the highlighted path by right clicking the log folder.

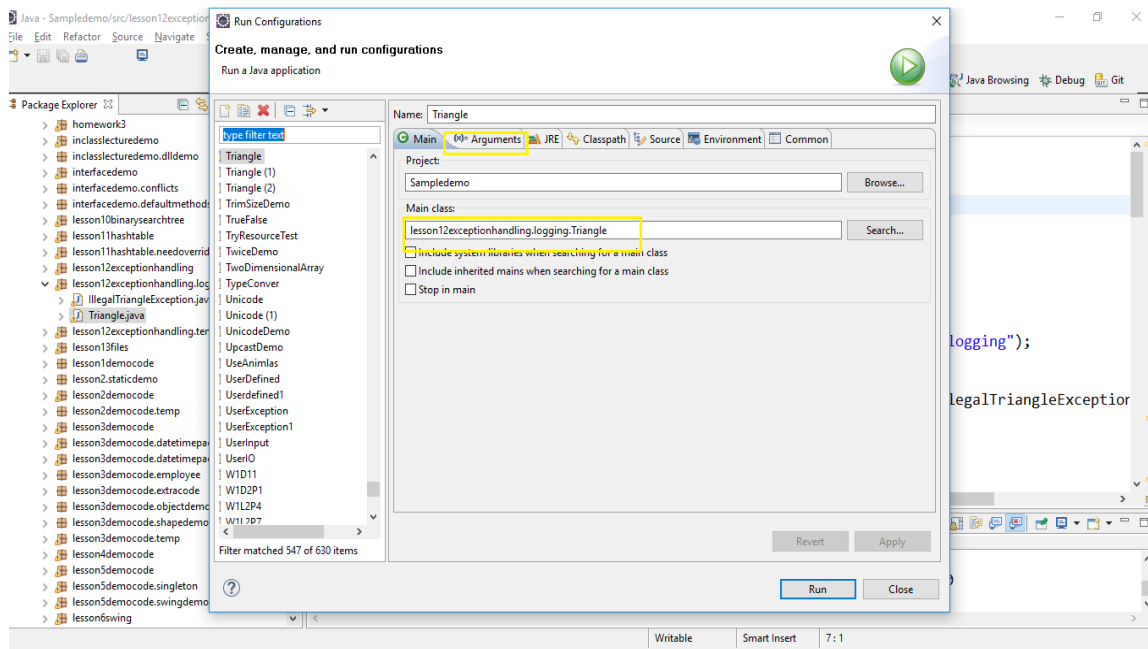
**`java.util.logging.FileHandler.pattern =`
`E:/ReMo/FPP-Coding/Sampldemo/src/logs/java%u.log`**



Step : 11 – Right click on your Triangle.java file and choose Run As -> Run Configurations

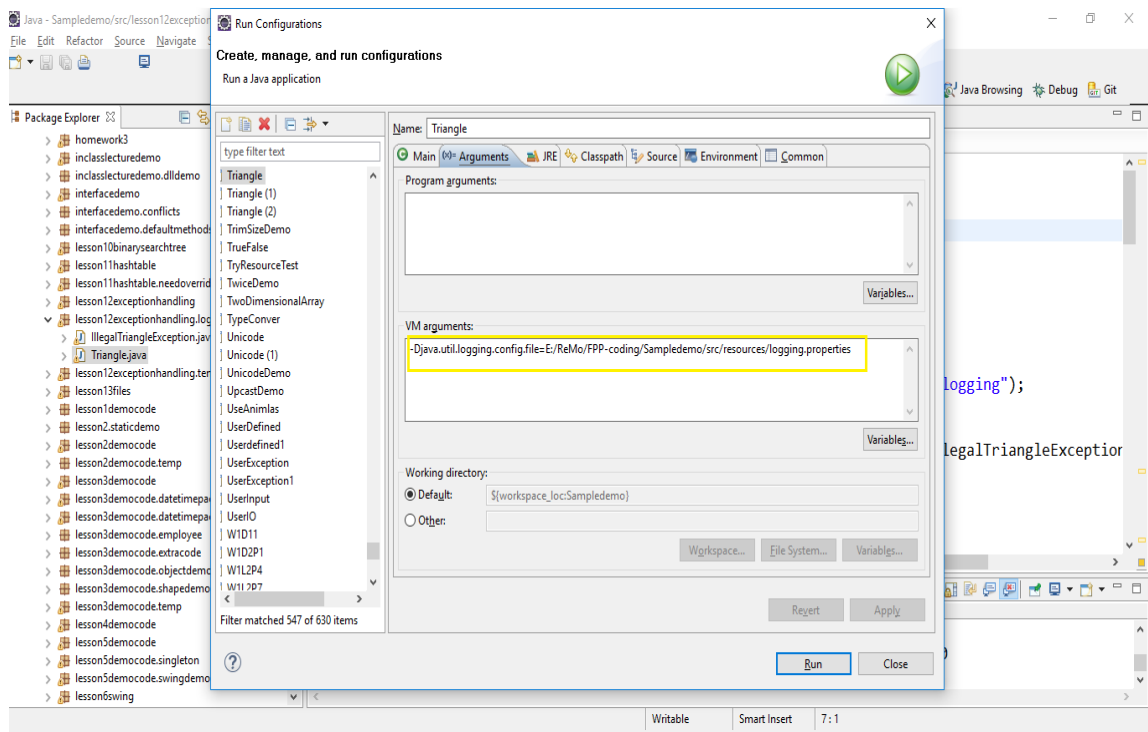


Step 12 : Make sure your Main class is Traingle.java or else modify the Main Class in the given screen shot and then click on the Arguments tab.

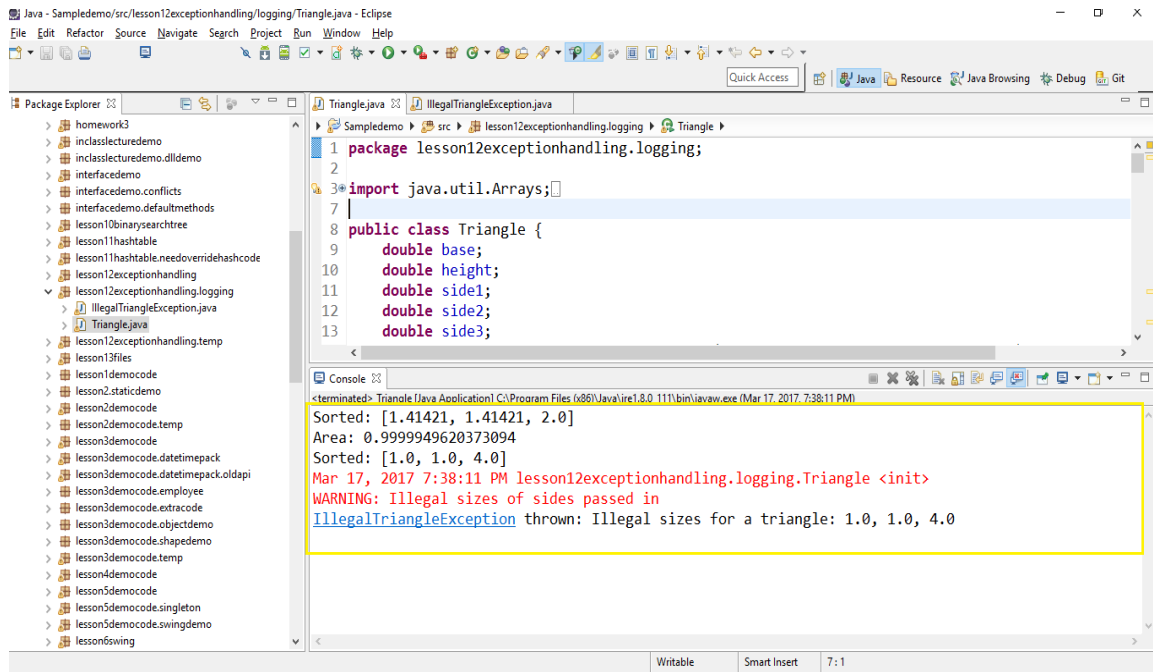


Step : 13 In the Arguments tab, type into the VM Arguments area something like the following line: (forward slashes should be used – *no spaces*). Copy and paste the below line. The highlighted path should be modified according to your project path where you created the logging.properties.

-Djava.util.logging.config.file=E:/ReMo/FPP-coding/Sampledemo/src/resources/logging.properties



Step : 14: Run your Traingle.java. You will get the screen as below mentioned



Step 15 : To see the logs file click the specific java0.log.0 or java0.log.1. Waring message exceptions, date and time are registered under the logs folder.

