Advanced Java Workshop

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Downloads:

1. Java JDK: [follow this link](https://www.oracle.com/java/technologies/javase/jdk16-archive-downloads.html) and download the **installer** for Linux, Mac, or Windows
2. jGrasp: [follow this link](https://spider.eng.auburn.edu/user-cgi/grasp/grasp.pl?;dl=download_jgrasp.html), scroll down, and download one of the first three options (no need to fill out the survey at the top)
   1. this is the IDE I will be using for this workshop, but you may use another IDE like VSCode or Eclipse if you would prefer

Workshop step-by-step:

1. Make sure you have the correct Java JDK and jGrasp downloaded
2. Create a new file in jGrasp
3. Review comments and add your name and a title to the top of the project
4. Import Java swing
5. Create a class
6. Create a static method “determineGuess” that returns a string and takes in three parameters
   1. Write an if-else statement
   2. Review Boolean operators (||, &&, ==, >, <, <=, >=)
   3. Return a string
      1. Review concatenation and escape characters
7. Create a main method
   1. Three integer variables
   2. Math.random for a number 1-10
   3. While loop
   4. JOptionPane
   5. Converting a string to an integer (.parseInt() )

Additional Challenges:

* Adding multiple rounds
* Calculation and displaying score
* Giving points based on the number of attempts
* Adding a more complex GUI