So, I used the Java- Junit testing in Eclipse video to help me with this assignment. The first thing that I did is created a Java Project in Eclipse and named it, ‘JUnitTesting’. Then I created a package so that it is not at default and named the package, ‘testing’. Then inside my testing package I created a class calling it, ‘WordOccurrences’. Then in my code a created a method a simple method involving int that passes in a number and gave it a variable name of x. Then in my code I made so that I can return x\*x. Then, I gave it a more complex method. In this method I made sure that it takes in a string and then I made it so to count the number of times the letter, A occurs in the string. Then I return an int because I wanted to return the count like the number of how times the letter a occurs however the parameter, I passed in was a string. So, in the parameter I passes a string that I just called, word. In the logic I kept a count variable by setting count equal to 0. I wanted it to be the type int. Then I looped through the word and checked on each character in the word to see if it is an A. To do this I wrote a for loop where for int n = 0 and then as n is less than word.length and incremented n every time. Now that I have done this, every time I am at the letter n, I check if that character is an A. To do this, I inserted an if statement. So, basically if word.charAt that means the character at this certain index. So, since I started off at 0, I went through the length to have my index. Then, to check against a character I used a single quote marks that includes the letter A. You can check to see if it is uppercase by entering two straight lines which stands for ‘or’ then say word.charAt the letter n equals with typing the equals symbol 2 times uppercase A. Then if one of those ends up being true, all I did was type increment count. Then outside of the for loop, I returned count. I wanted to count to increment until that for loop is complete and then whatever count had gotten up to is the number I wanted to return. So then, I added, return count at the end. Now that I have my code, I made a Junit test for it. To do so, I right clicked on my testing package and selected new, Junit test case, naming it, ‘totalWordsTest’ then making sure is the Junit 5 library to the build path is selected, and pressed finish to create it. Then on the left panel you will see you have the jar files under Junit5 in order to execute the code. Then, by default in my totalWordsTest java file, it will say fail not yet implemented, do not worry and just delete that line. Then, I replaced that deleted line by typing what I want to test which is the WordOccurrences java file (type: WordOccurrences test = new WordOccurrences();) which is an object. Now I went ahead and got the result of passing in some time of parameter and test it against a random number. (type: int output = test.totalWords(5); ). So, this means is test is the object that I created from the WordOccurrences testing class meaning the method I called is totalWords that returned an int and that int is called, output. When I pass in the parameter 5, I expect the output to be 25. So, to see if my code is correct, at the end of my code, I inserted, assertEquals (25, output); then I hit run making sure it says, totalWordsTest and make sure everything is saved before pressing run, then it outputs that your code runs 1/1 with 0 errors and 0 failures meaning your code is correct. Then you do the exact same steps for making another test case for countA. To do this just go back to your package then select a new Junit test case and I called, it ‘countAtTest’. After creating it, I just repeated the exact same steps I did for my totalWordsTest java file for its own code. The last thing I did is put all my Java files into one file to run all the tests at once. Go to package explorer and press other and select Junit test suite then a AllTests java file generates, and then run it again and it shoud output the green bar again this time saying, 2/2 runs were done with 0 errors and mistakes.