In the main, the first thing that is called is getNum. The method sets s as an empty string and sets n as 3 and increments n in a for loop until it reaches 7. The method, getNum, uses s and n, where s is the string that the program created, and n is the length the string should be. This method gets the length of s and sees if it is equal to n. If they are unequal, then it goes to the main so it can add an extra character to string s. If they are equal, then it goes to the check method. The check method takes in s from the getNum method. In the check method, it opens the text file, and reads every lines of the text. Then there is a for loop where it splits every line into 3 section through the commas, the first being the username, the second being the salt value, and the third being the hashed password. It then gets the s, then adds the salt value at the end, hashed that combination, and checks if the hashed combination matches the hashed password. If it does, then it prints out the password along with the username. If it doesn’t, it goes back to the getNum method and increments s by one until the hash combination and the hash password matches. I used 4 test cases, where one was under the set length, one was over the set length, one wasn’t numbers, and nothing being wrong with the last one. The reason for the first 3 test cases were to show that if the password wasn’t a number with the length of between 3 and 7, then it wouldn’t print anything out for it. The reason for the fourth one was to show that it would print out the password if it followed the criteria.