



CYBER CHALLENGES



Challenge Set: Time Complexity

Directions:

This challenge set will take place in your browser. Go to <https://tinyurl.com/7d5kp7yf> . You will need to open your "team.data" file and copy the entire contents of the file. Then paste that into the textbox on the webpage. Click "Log in" to access the page where you will submit your answers.

Given in this challenge set are several pdf files. Each file contains 5 coding snippets (labelled a, b, c, d and e). The file "Group 1.pdf" corresponds to "Group 1" on the webpage (and so on for the other 3 groups). Simply analyze the code and select the time complexity in Big Oh notation.

You may submit your answers as many times as you wish, however each time you submit, there is a delay that is added. This means the more you submit, the longer you have to wait to see the results. So double check your answers before submitting! Also note that you will only ever know how many you got correct, not which ones are correct.

Since there are no passwords to the pdf files, you are free to tackle the code snippets in whatever order you like. I would suggest trying to answer as many of them as you can before hitting submit, to mitigate the increasing server time delay.

Note that doing subscripts in a drop down list box is just not supported by most browsers. Therefore, when the list box says something like " $n \log_3 n$ ", it really means " $n \log_3 n$ " (or, equivalently, " $n * \log_3(n)$ "). That is, the "3" is really the base of the log. This goes the same for the other log time complexities.

One final note, do **not** refresh the browser page! Doing so will cause a resubmit and will increase the server delay for your team.