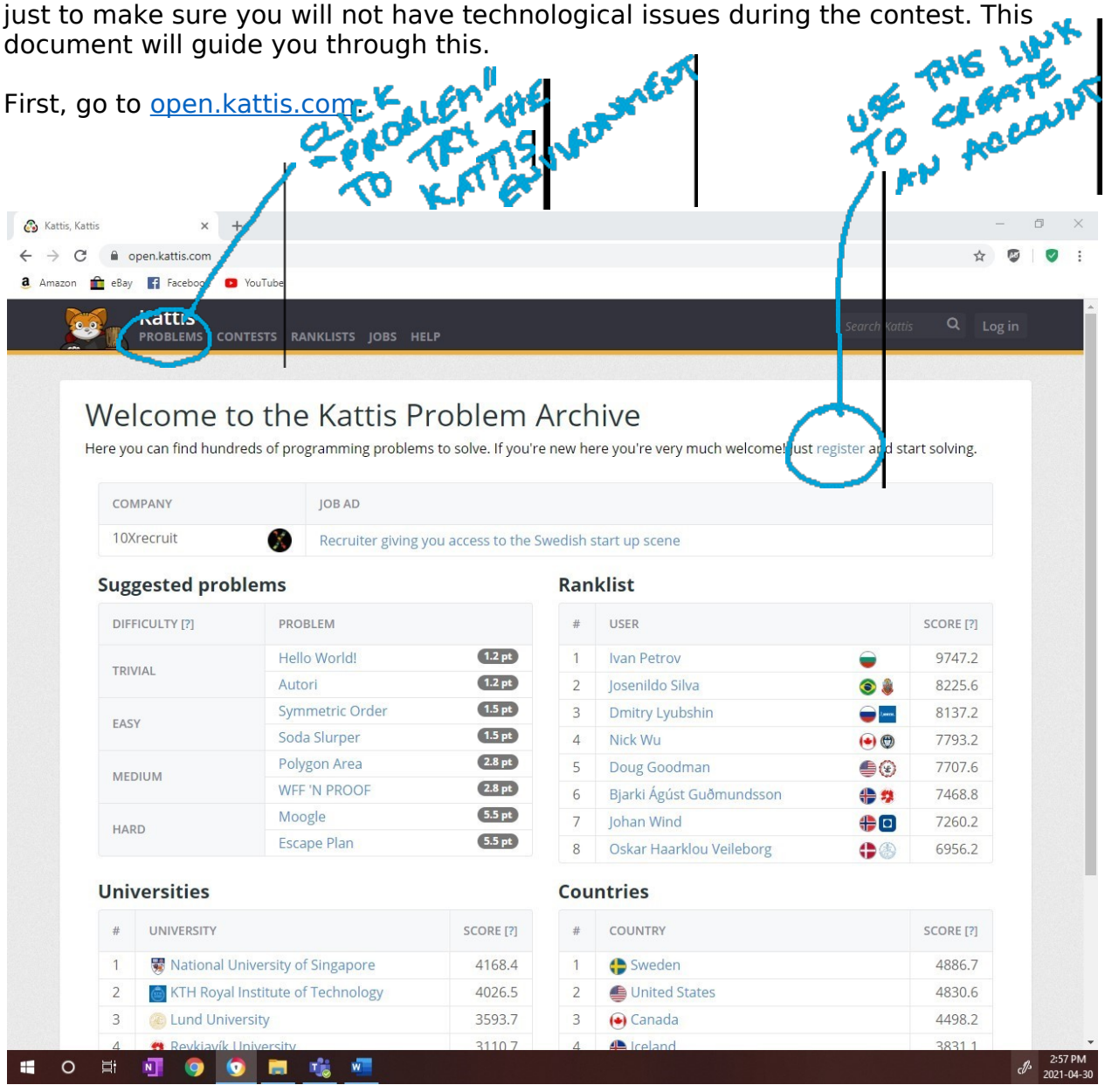
Getting Started with Kattis

(by J. Tasse, May 2021)

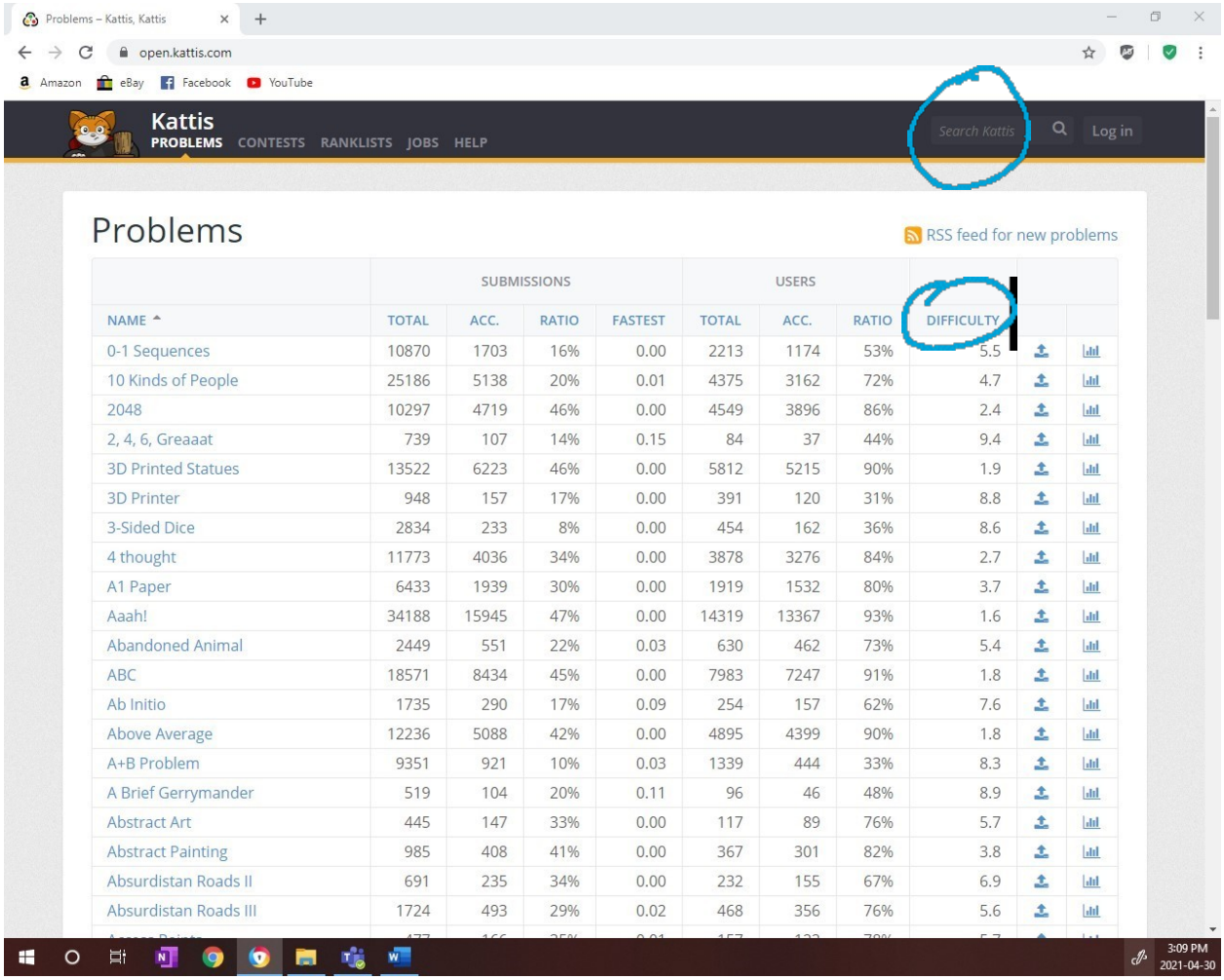
We will be using Kattis for the NB High School Programming Contest this year. Before the contest starts, you must create an account there. You should also get familiar with this environment, and try submitting the solution to an easy problem, just to make sure you will not have technological issues during the contest. This document will guide you through this.

First, go to open.kattis.com.

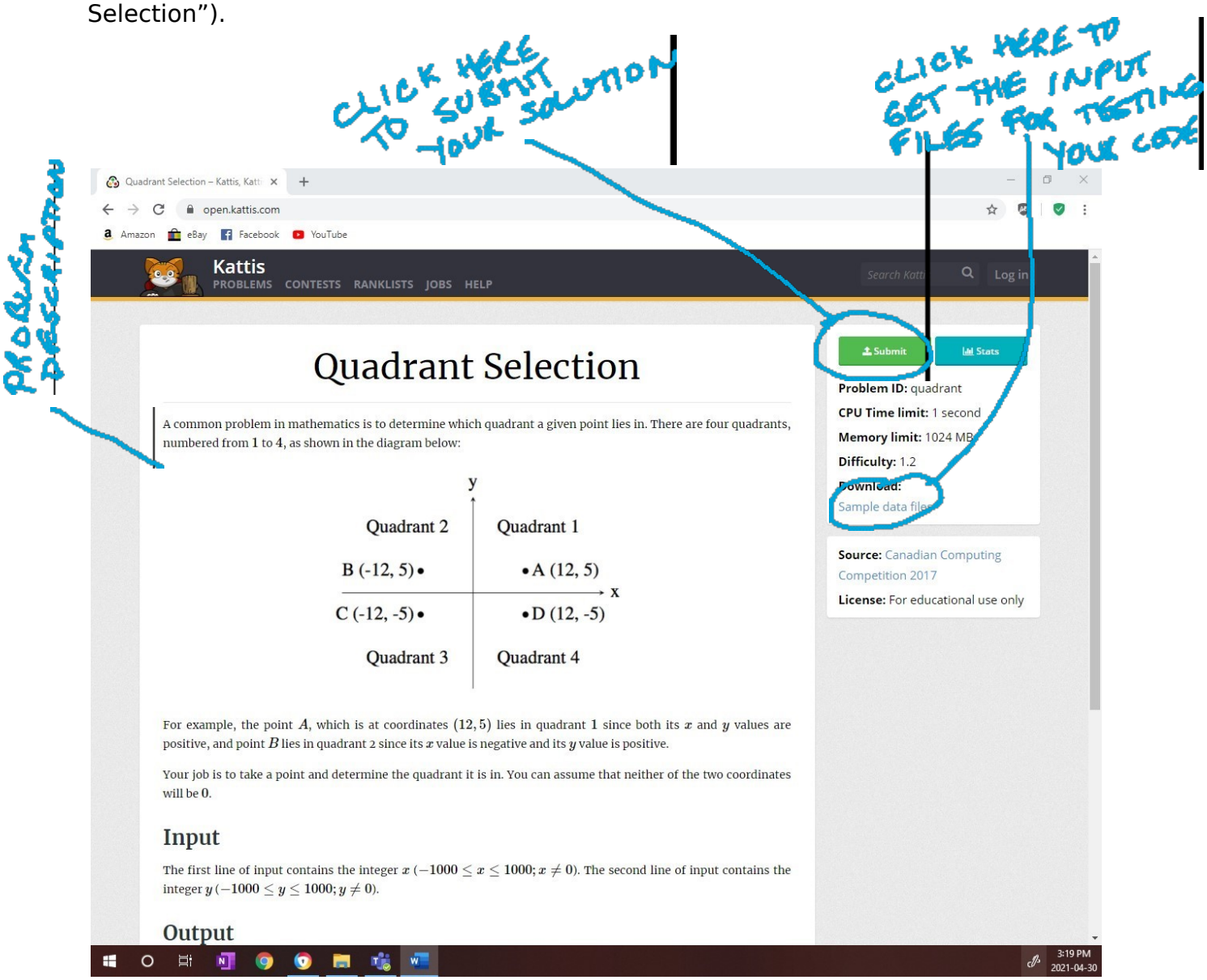


Once you created your account, click “problems” to try out this environment. All problems in the competiton will use the same format and submission process. You do not need to be in a contest in order to submit solutions to problems and get them judged.

When clicking “problems”, you get all problems available in Kattis...the easy ones and the hard ones!
Click “DIFFICULTY” to get those problems sorted by difficulty levels, so that you can try the easiest ones. I recommend that you try the problem “Quadrant Selection” to get familiar with the system. Note: you can also access a given problem by searching it (see the search area at the top).



Here is what the page will look like after selecting that problem (“Quadrant Selection”).



Be very careful with the Input/Output specifications.

Make sure that your program runs properly with any input matching the specifications provided. You do not have to add code for checking that the input does indeed have that format (e.g., checking that the first line does contain a single number in the specified range, for the example above): it is guarateed that the input will meet such specifications.

Be very careful with the output format. Even adding an extra space somewhere would be considered as a wrong answer! Make sure you do not have any spelling

mistake, that you have a return character at the end of each line, and that you do not have extra blank lines at the end.

Develop your solution in your own IDE / programming environment, outside of Kattis. Use the sample data files provided to help you test your program.

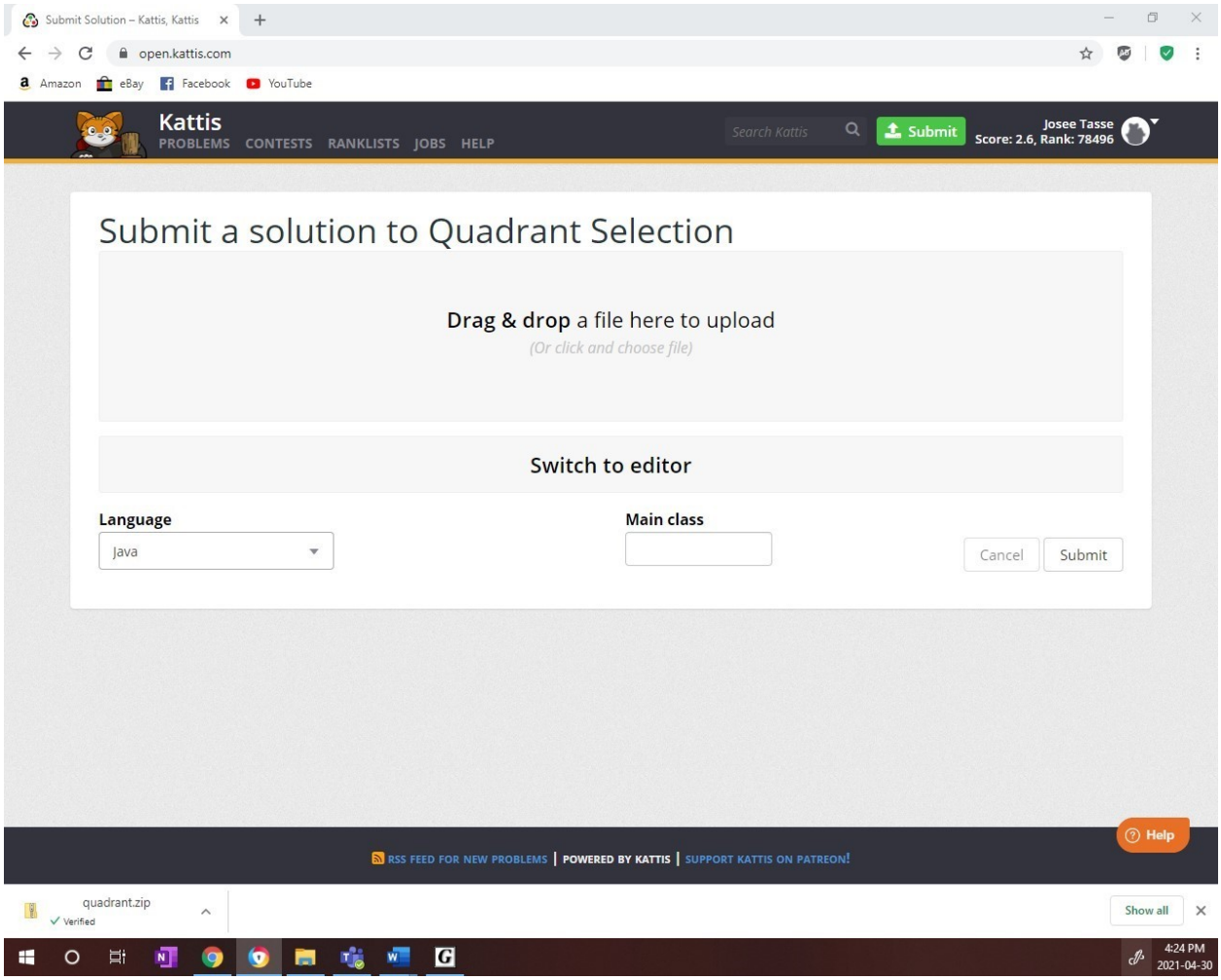
When you submit your program for judging, the verification process is completely automated: your program is first compiled, and then run multiple times using different inputs. Your output is compared to the expected output. So although you should read your input from standard input (i.e., keyboard) and print to standard output (i.e., monitor), you should not worry about telling the user what to enter (e.g., “Enter the value for x: “. This would actually get your program rejected.

There are 2 ways you can test your program. First, you can use the “command prompt” to run it by feeding it the input file. The following video does show you how this can be done for Java and for Python: Video “Kattis – Getting Started”: https://www.youtube.com/watch?v=7NHyzBN4GAM

Note that the video contains also other information about Kattis. The part about running at the command prompt starts around the 3:00 mark.

You can also run your program directly inside your IDE (as you are used to), copy-pasting the whole content of the input file at once at the first occurrence of the programming waiting to get some input. Check your output after the last line of input.

Once you are ready to submit, click on the “submit” button, which will get you to the window below. Note: this will not work unless you are signed in. Please make sure that you upload your file, select the programming language used, and add any other requested information specific to your language (e.g., type the Main class in Java).



Please try this out before our contest, to get familiar with the Kattis environment. If you have any problems (before the contest), please do not hesitate to contact us: Owen Kaser (owen@unb.ca).