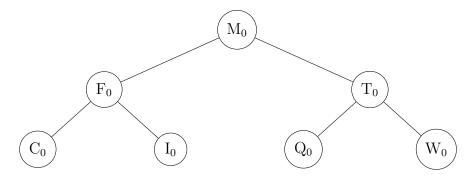
# University of Waterloo CS240 Spring 2022 Tutorial 00

# 1 Mathematics

Write a proof showing that  $\log(n!) \in O(n \log n)$ .

## 2 Trees

We will add the letters Z, A, and B to the BST below.

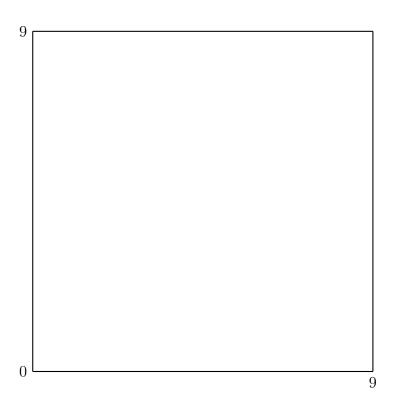


Hint: For nodes with only one child, you may wish to use "child[missing]" for the non-existent child.

### 3 Plots

Plot the following points below. Only show the resulting plot.

Points: (2,7), (1,3), (3,1), (7,7)



#### 4 Latex Resources

LATEX Editors

a) TeX Live: https://www.tug.org/texlive/

b) TeXstudio: https://www.texstudio.org/

c) Overleaf: https://www.overleaf.com/

d) pdflatex: on the student environment

#### Miscellaneous Resources

- http://detexify.kirelabs.org/classify.html
- https://oeis.org/wiki/List\_of\_LaTeX\_mathematical\_symbols
- https://en.wikibooks.org/wiki/LaTeX
- https://tex.stackexchange.com/