PCP Autumn 2020
Theory Assignment 1
Chapters: 1 & 2
Submission Date: ~~30th September~~ 1st October 2020, 9:00 pm

Q1 **(15 points)**. Exercise 6 (page 18) from the 1st chapter of the book. This question is about Amdahl's law.

Q2 **(15 points)**. In the programming assignment you implemented Peterson's Tree based Lock algorithm (PTL). Now, please prove the correctness of this algorithm as asked in Exercise 13 (page 41) from the 2nd chapter of the book. As mentioned in the book, for each property described, either sketch a proof that it holds, or describe a (possibly infinite) execution where it is violated.

Q3 **(15 points)**. Exercise 15 (page 48) from the 2nd chapter of the book.