CSCI-P 538 Fall 2016 Homework 2

A Deadline

October 21 2016 23:59:59 EDT. This is a hard deadline and no extension will be given. Any clarification queries should be sent to `p538fall16-l@list.indiana.edu`.

B Homework Guideline

1. Describe the reasoning process of how you reach your final solution. You receive no credit by only submitting a final answer.
2. Write down the problem number (**Ch*x* P*y***, which means the y-th problem in Chapter x) before each of your solutions.
3. Submit a single document to Canvas before the deadline. Acceptable formats are PDF (preferred), Microsoft Word, and text. Only electronic submission is allowed.
4. Note we are using the 6th edition of the textbook instead of the 7th edition.

C Problem Description

Please work on the following problems in the "Problem" section of Chapter 3:

- **Ch3 P4** (10 pts).
- **Ch3 P6** (10 pts).
- **Ch3 P8** (10 pts).
- **Ch3 P23** (10 pts).
- **Ch3 P27** (20 pts). [See Figure 3.35 and 3.36 for examples of timing diagrams]
- **Ch3 P28** (10 pts).
- **Ch3 P32(a)(b)** (15 pts).
- **Ch3 P37** (20 pts).
- **Ch3 P40** (33 pts).
- **Ch3 P45** (15 pts). [Hint: (a) The loss rate, L, is the ratio of the number of packets lost over the number of packets sent. In a cycle, one packet is lost. What is number of packets sent in a cycle? (b) When W is large, $\frac{3}{8}W^2 \gg \frac{3}{4}W$, so the latter part can be ignored.]
- **Ch3 P46** (15 pts).

D Honor Code

Students must follow the IU honor code (`http://www.iu.edu/~code/code/responsibilities/academic/index.shtml`). This homework is an individual assignment, and no collaboration among students is allowed. In no case may your solution be copied from another student or a third-party source. Any violations of the honor code will be dealt with strictly, including but not limited to receiving no credit for the entire homework.