CS557
Project 1 – Floodlight & MiniNet
Grading Guidelines

Grading will be done using one of the following methods:

- You demonstrate your program to me in person
- You submit your program to CANVAS
    - I compile and run it on my virtual machine where I will run a few random tests
    - And you submit output from your program to demonstrate how much you got working

You will note that the heaviest grading component goes to the static case (60 points). The dynamic case (remove switch, remove link, etc.) is worth 20 points. Invest your time wisely, don't panic if you can't get the dynamic case working.

Scoring:

1. Procedural: 20 points
    a. 10 points: Program compiles with ANT
    b. 10 points: You have included a README document
        i. Explains how far you got
        ii. Outlines the changes you have made to the controller to integrate shortest path routing to the switches.

2. Option 1 -- Ability to write forwarding rule to a switch: 20 points
    a. Demonstrating that PING works between any two hosts with any topology can satisfy this.
    b. These 20 points exist only if you do not get your shortest path algorithm working, but can at least write a rule to a switch.

3. Option 2 – Static routing with Shortest Path Implementation: 60 points
    a. 15 points each by demonstrating four of the given seven possible topologies.
    b. One of the topologies must be either *Assign1* or *Someloops*.
    c. Pingall will be sufficient to show that routes work. You should also include the output from a dump routing tables from 1 or 2 switches so I can look at the routing rules inside the switch.

4. Dynamic changes to the topology: 20 points
    a. 5 points each for demonstrating
        i. remove a link between two switches (graph must still be connected).
        ii. add the link back again.
        iii. remove a link between a switch and a host, removing the host.
        iv. add back the link between the switch and host.