**CSCI 400 – Programming Language Concepts – Spring 2019**
**HW 08 – Program Correctness (10 points)**

**This assignment is to be turned in through Blackboard.**

1. (5 points) Compute the weakest precondition for the following code:

```
if x < y then
    x = x + 1
else
    x = x * 3
end
{x < 0}
```

2. (5 points) Give a partial proof of correctness for the following code:

```
{n > 0}
count = 1
sum = 0
while count <= n do
    sum = sum + count
    count = count + 1
end
{sum = 1 + 2 + ... + n}
```